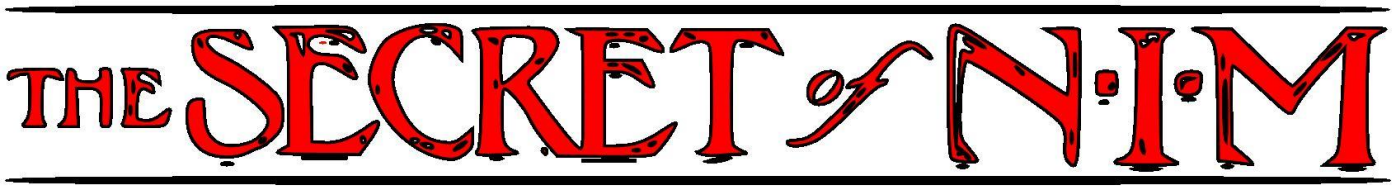


User Manual

Version 1.1.9beta April, 28 2014

By Arnaud Dochain
arnaud.dochain(at)gmail.com
IMCN/NAPS
Université Catholique de Louvain

1 Introduction 5
2 System Requirement 5
2.1 Server side 5
2.2 Client side 5
3 Installation 6
4 Windows and menus 8
4.1 Main menu 8
4.2 Project information page 9
4.3 Project viewer page 10
4.4 Module information page 11
4.5 Module viewer page 12
5 Single Module Edition 13
5.1 Create a new module/ Edit Module information 13
5.2 Adding a plug 16
5.3 Adding a parameter 18
5.4 Show legend, Parameters List and Plugs List 20
5.5 Edit plugs and parameters 21
5.5.1 First method: Using the List 21
5.5.2 Second method: By clicking on the plug 24
5.6 Delete plugs and parameters 25
5.6.1 First Method: Using the Parameters List 25
5.6.2 Second Method: Clicking on the parameter 27
5.7 Save module on disc 28
5.7.1 First method: Using the Main Menu 28
5.7.2 Second method: Using the Module Editor 29
5.8 Load module 30
5.9 Deleting module 32
6 Projects Edition 33
6.1 Creating a new project/Editing project information 33
6.2 Adding a new rack 35
6.3 Editing rack position and size 37
6.4 Deleting a rack 39
6.5 Adding a new module 40
6.6 Moving a module 43
6.7 Delete a module 45
6.8 Adding a wire 46

6.9 View a wire 49
6.10 View all wires 50
6.11 Hide all cables 51
6.12 Show project wires list, module parameters and legend 52
6.13 Edit wire plugs and length 53
6.14 Delete a wire 56
6.14.1 First method: Select only one wire 56
6.14.2 Second method: Using the cables list 57
6.15 Set and Edit parameters 59
6.15.1 First step: Add and edit a parameter by clicking on it 59
6.15.2 Second method: Edit from the parameters list 62
6.16 Delete Parameter 63
6.17 Print the project 64
6.17.1 First method: Using the “Project” page 64
6.17.2 Second method: Using the Main Menu 65
6.18 Save project on disc 66
6.18.1 First method: Using the “Project” window 66
6.18.2 Second method: Using the “Main Menu” 67
6.19 Load a project from the disc 68
6.20 Delete a project 70
7 Advanced functionalities 72
7.1 Repair all project 72
7.2 Repair all modules 72
7.3 Optimize database 72
7.4 Delete all projects and modules 72

1 Introduction

The Secret of NIM is a PHP/MySQL and JavaScript software. It shows a graphical representation of a logic scheme with wires connecting logic modules which have specific parameters. This software has been developed for NIM/TTL logic, thus his simplicity allows also the representation of other logic systems, numeric systems or analogic systems i.e. the pedal board of an electric guitar.

The Secret of NIM is divided in two parts. The first one is the main part of the software. It edit different project, connect modules with wires and edit the parameters of those modules. The other part of the software is a utility. It edits the modules which will be used for the projects or create them if they aren't in the database yet

The Secret of NIM is all-in-one software, easy to use and very helpful for saving the wiring of an experiment. But it can't do the logic itself; it allows only a visualization of the logic.

2 System Requirement

2.1 Server side

- Apache 2.2 (2.2.22 used)
- PHP 5.3 (5.3.10 used) PHP 4 doesn’t works
- MySQL 5.5 (5.5.34 used)

This kind of server can be easily installed on Windows (Wamp), Linux (Lamp) and Mac OS (Mamp).

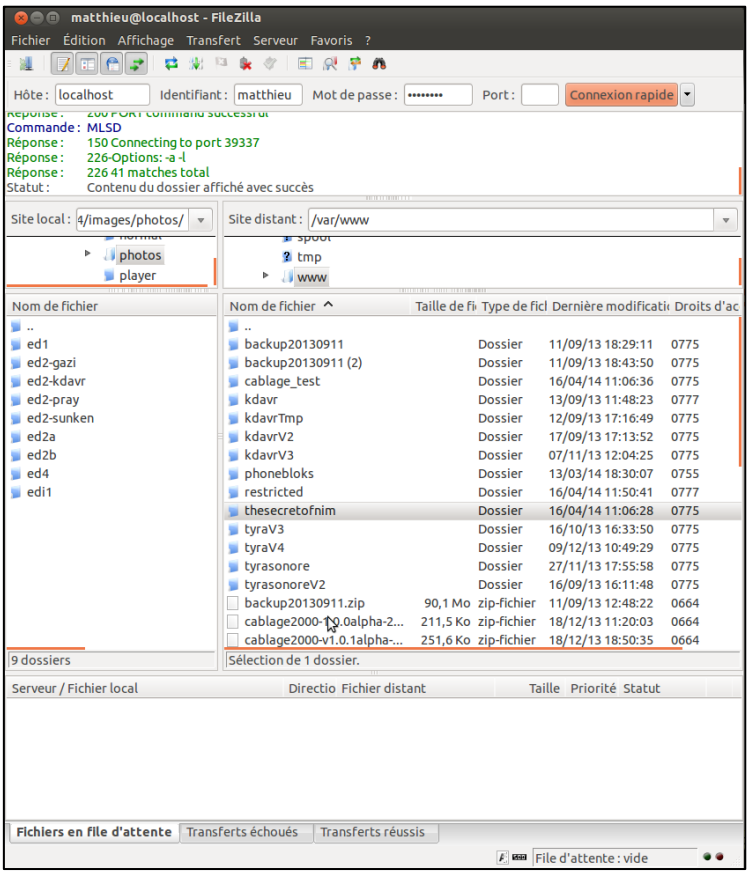
2.2 Client side

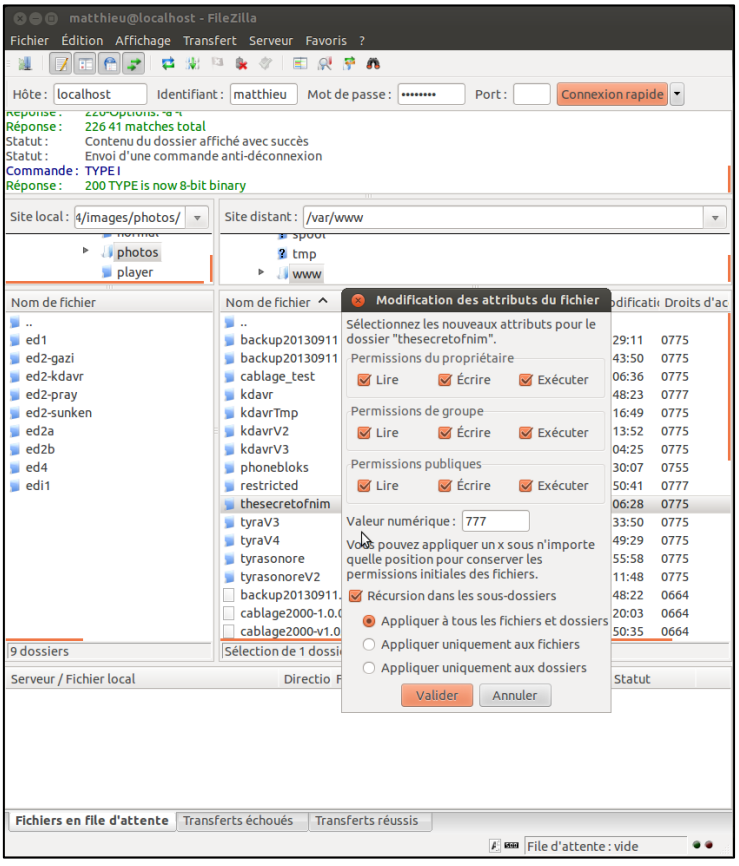
- Firefox 26
- Google Chrome 31
- Internet Explorer 10

Other browser may work but hasn't been tested yet.

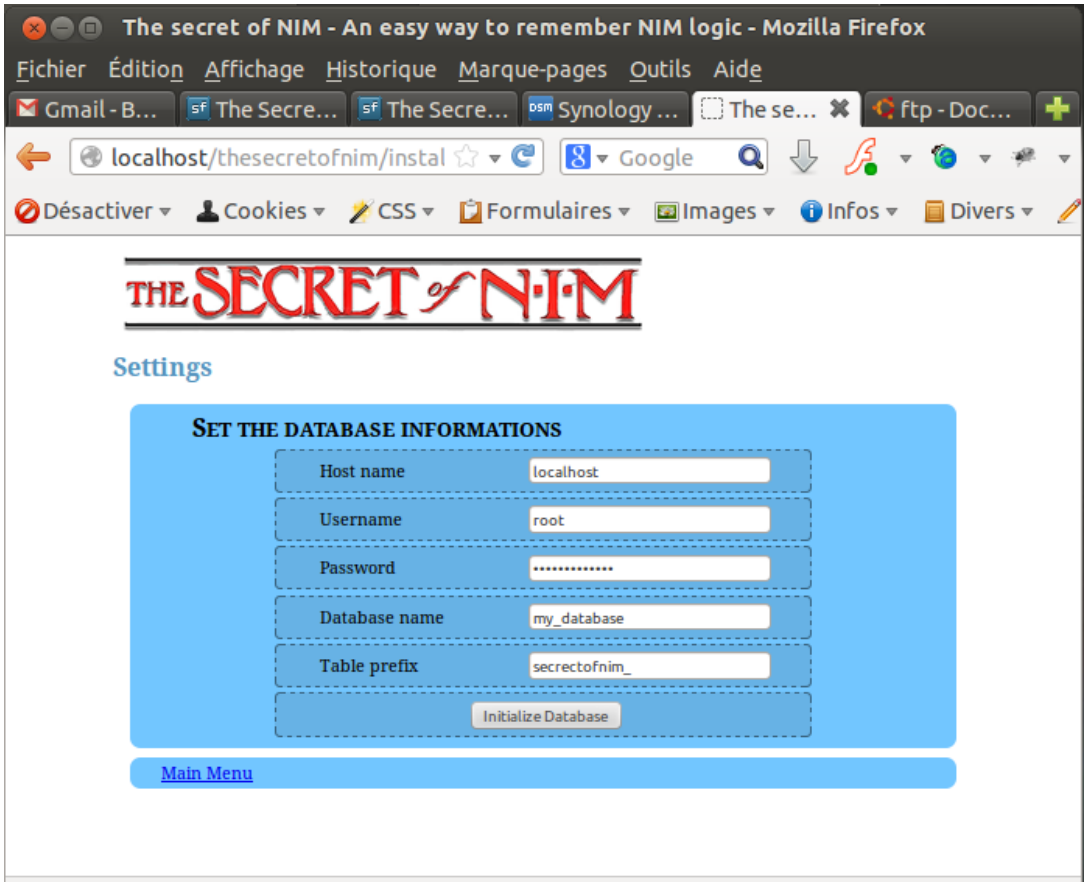
3 Installation

1. Unzip the folder and paste it on the server (using a FTP client, i.e. FileZilla).
2. Make sure that folders and file can be created/edited and deleted by PHP (chmod 0777).


matthieu@localhost - FileZilla
Fichier Édition Affichage Transfert Serveur Favoris ?
Hôte : localhost Identifiant : matthieu Mot de passe : Port : Connexion rapide
Commande : MLSD
Réponse : 150 Connecting to port 39337
Réponse : 226-Options: -a -l
Réponse : 226 41 matches total
Statut : Contenu du dossier affiché avec succès
Site local : 4/images/photos/
Site distant : /var/www
photos
player
tmp
www
Nom de fichier
Taille de fi
Type de fich
Dernière modificati
Droits d'ac
backup20130911 Dossier 11/09/13 18:29:11 0775
backup20130911 (2) Dossier 11/09/13 18:43:50 0775
cablage_test Dossier 16/04/14 11:06:36 0775
kdavr Dossier 13/09/13 11:48:23 0777
kdavrTmp Dossier 12/09/13 17:16:49 0775
kdavrV2 Dossier 17/09/13 17:13:52 0775
kdavrV3 Dossier 07/11/13 12:04:25 0775
phonebloks Dossier 13/03/14 18:30:07 0755
restricted Dossier 16/04/14 11:50:41 0777
thesecretofnim Dossier 16/04/14 11:06:28 0775
tyraV3 Dossier 16/10/13 16:33:50 0775
tyraV4 Dossier 09/12/13 10:49:29 0775
tyrasonore Dossier 27/11/13 17:55:58 0775
tyrasonoreV2 Dossier 16/09/13 16:11:48 0775
backup20130911.zip 90,1 Mo zip-fichier 11/09/13 12:48:22 0664
cablage2000-v1.0.0alpha-2... 211,5 Ko zip-fichier 18/12/13 11:20:03 0664
cablage2000-v1.0.1alpha-... 251,6 Ko zip-fichier 18/12/13 18:50:35 0664
9 dossiers
Sélection de 1 dossier.
Serveur / Fichier local
Directio
Fichier distant
Taille
Priorité
Statut
Fichiers en file d'attente
Transferts échoués
Transferts réussis
File d'attente : vide


matthieu@localhost - FileZilla
Fichier Édition Affichage Transfert Serveur Favoris ?
Hôte : localhost Identifiant : matthieu Mot de passe : Port : Connexion rapide
Réponse : 226 41 matches total
Statut : Contenu du dossier affiché avec succès
Statut : Envoi d'une commande anti-déconnexion
Commande : TYPE I
Réponse : 200 TYPE is now 8-bit binary
Site local : 4/images/photos/
Site distant : /var/www
Modification des attributs du fichier
Sélectionnez les nouveaux attributs pour le dossier "thesecretofnim".
Permissions du propriétaire
Lire
Écrire
Exécuter
Permissions de groupe
Permissions publiques
Valeur numérique : 777
Vous pouvez appliquer un x sous n'importe quelle position pour conserver les permissions initiales des fichiers.
Récursion dans les sous-dossiers
Appliquer à tous les fichiers et dossiers
Appliquer uniquement aux fichiers
Appliquer uniquement aux dossiers
Valider
Annuler
9 dossiers
Fichiers en file d'attente
Transferts échoués
Transferts réussis
File d'attente : vide

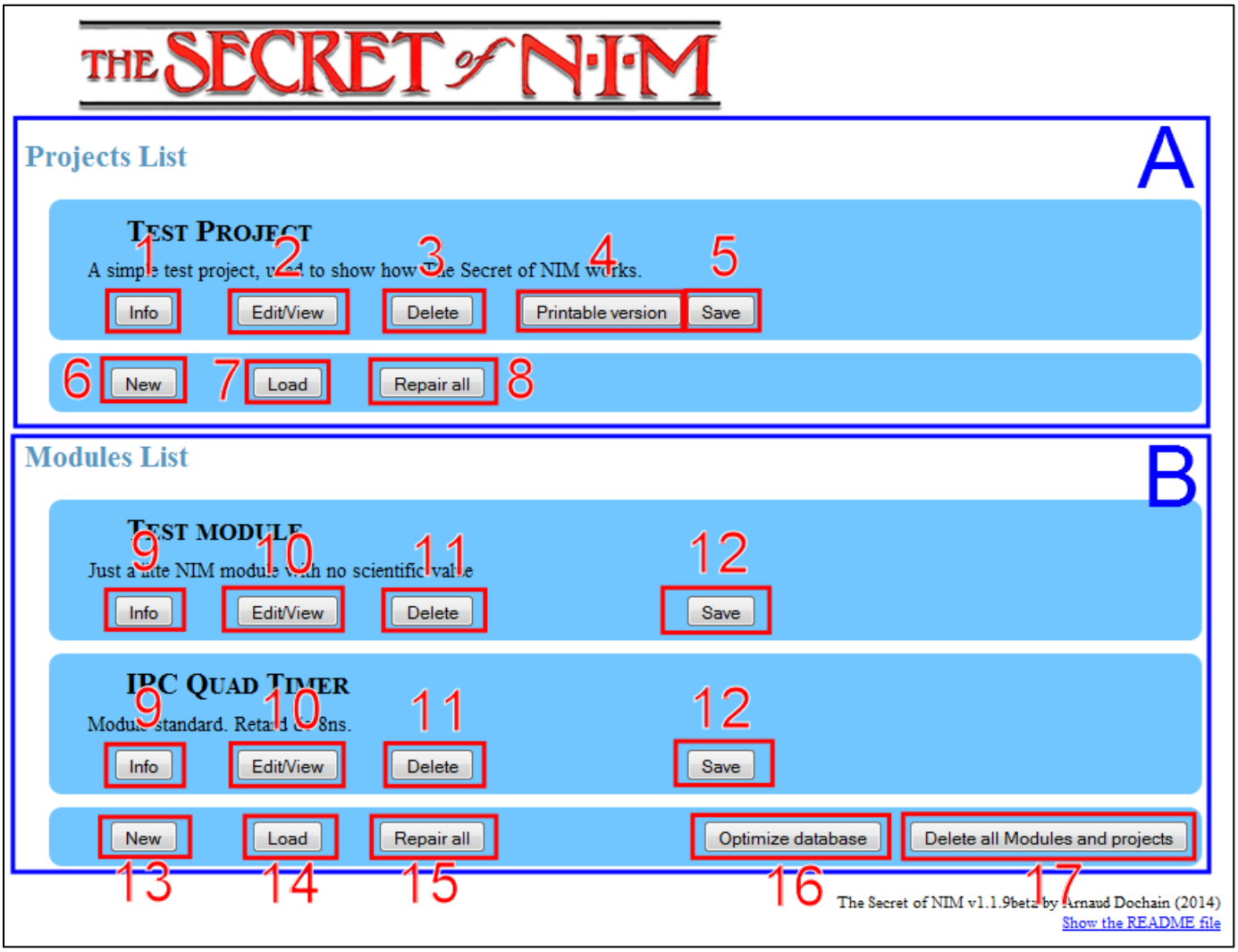
3. Open a web browser and load the page "index.php" or "install/index.php".
4. Enter the following MySQL information :
    - Host name: the address of the MySQL server (usually "localhost", but it may vary).
    - Username: the username used to connect to MySQL
    - Password: the password...
    - Database name: The name of the database where the Secret of NIM will be stored.
    - Table Prefix: a prefix added to the name of your tables in the database. Be sure that it's not used by another program.
      If you are on an external web hosting service, they might have given to you the Hostname-Username-Password-Database name.



5. Click on "Initialize database"
6. The Secret of NIM is now ready to use. If not, there might be a problem with the operation 2 or 4.

4 Windows and menus

4.1 Main menu

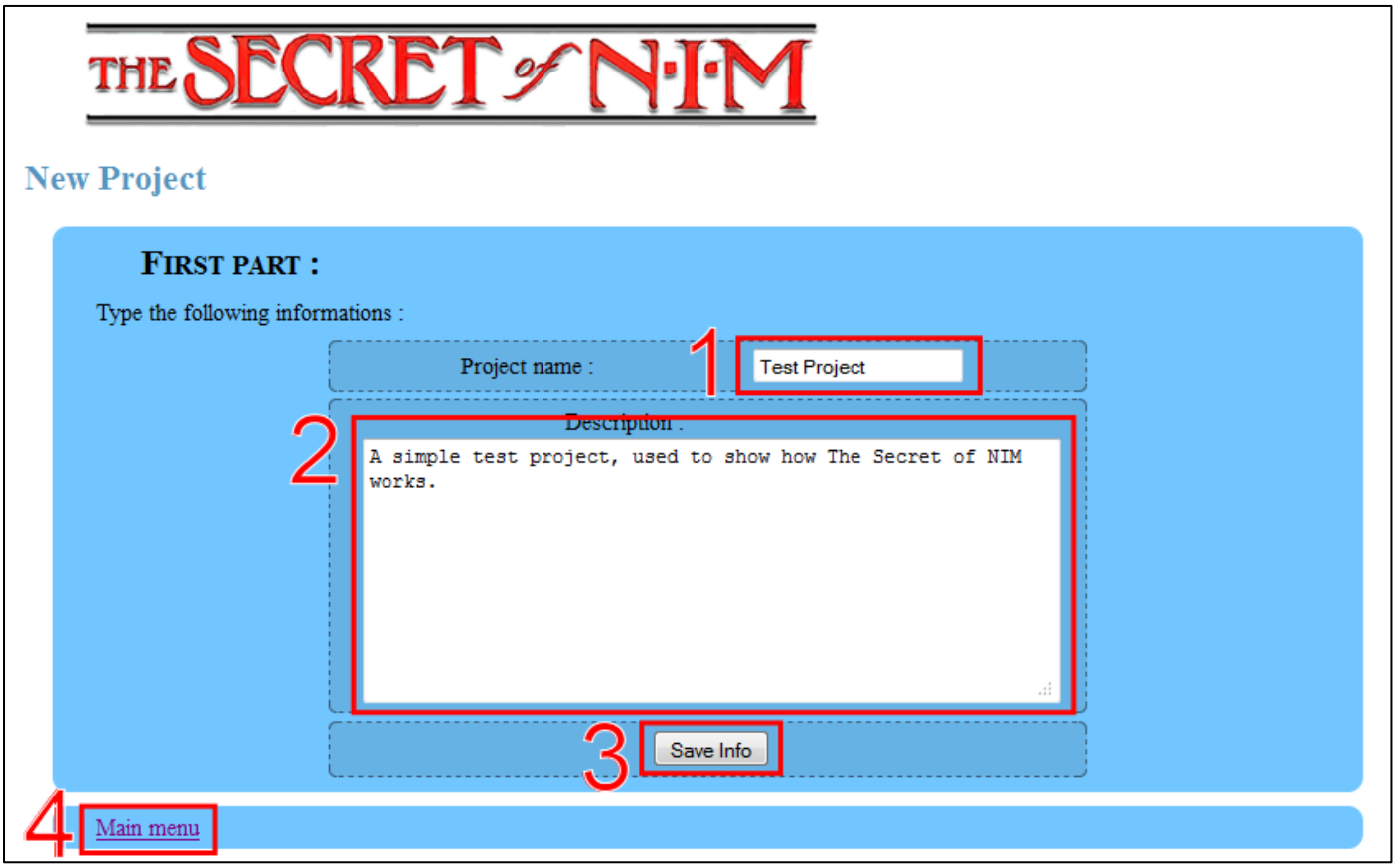


Details of the main menu page:

A. Project list section
   1. Project basic information
   2. Edit/View the project
   3. Delete the project
   4. Printable version of the project
   5. Save the project on the disc (in a .ZIP file)
   6. Create a new project
   7. Load an existing project
   8. Repair the broken project

B. Module list section
   9. Module basic information
   10. Edit/View the module
   11. Delete the module
   12. Save the module on disc (in a .ZIP file)
   13. Create a new module
   14. Load an existing module
   15. Repair all the broken modules
   16. Optimize database
   17. Delete all modules and projects

4.2 Project information page

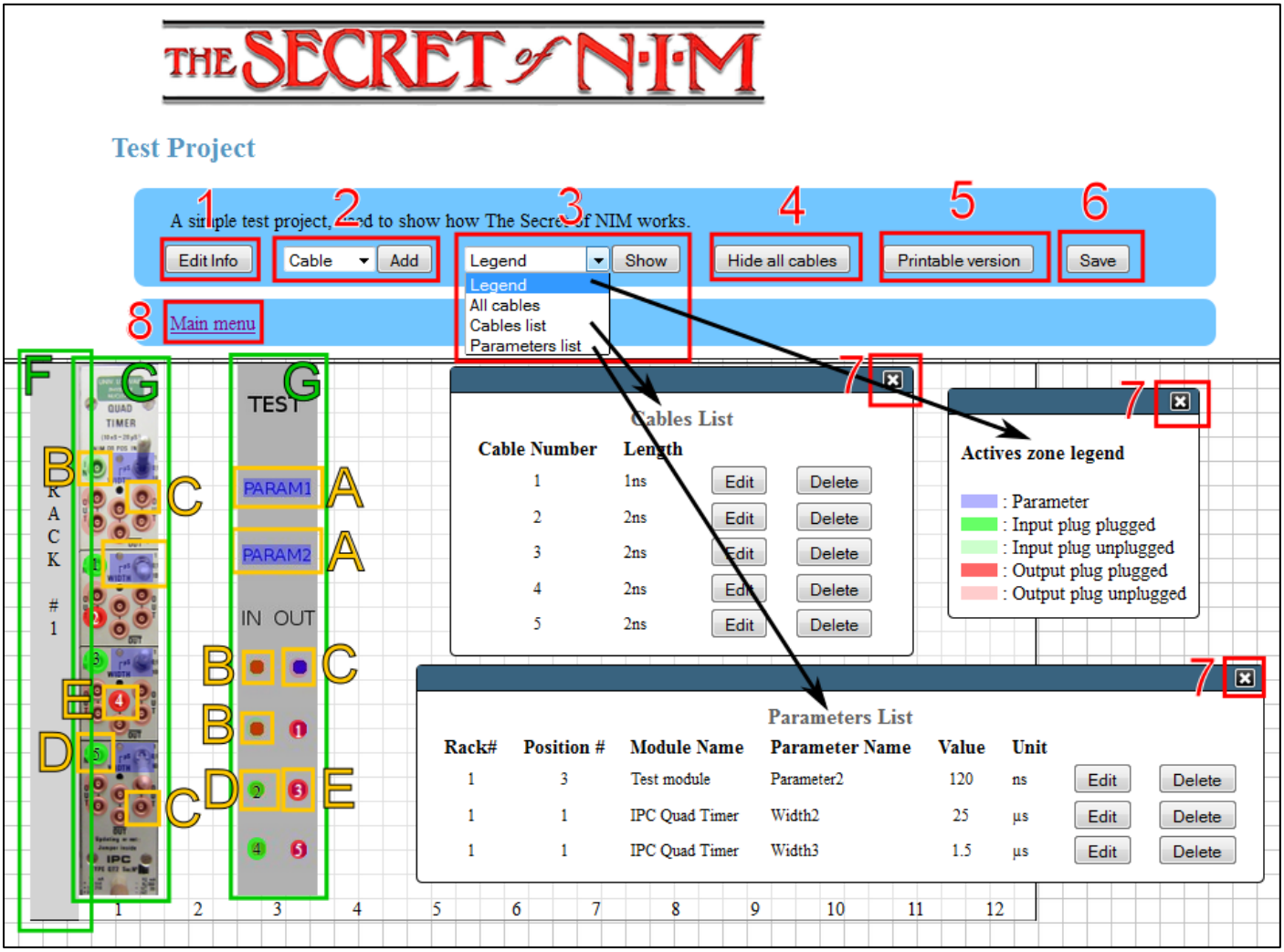


Details of the Project description page:

1. Project name input
2. Project description input (doesn't support new line, html… yet)
3. Save button (CTRL+S doesn't work yet)
4. Back to main menu link

As you can see there is nothing complicated here.

4.3 Project viewer page



The project viewer page can do much different stuff. In this section the main ones will be explained.

1. Go to the project information page
2. Get the dialog box that allows you to add:
    a. a wire (cable)
    b. a rack
    c. a module
3. A menu that allows to shows
    a. the wires list (cable list)
    b. the parameters list
    c. the legend
    d. all the cables (it connect the plugged plugs together)
4. Hide all the wires actually shown
5. Get a print friendly page of the project
6. Save the project in a .ZIP file (the project is always saved on the database)
7. A close button, close the given dialog box (you can also move them if you move the bar on the top of the dialog box)
8. Back to the main menu link

There are also plenty of active zones on this page:

A. Get the dialog box used to set a parameter
B. (Inactive) Unplugged input plug
C. (Inactive) Unplugged output plug
D. Plugged input, get the associated wire info dialog box
E. Plugged output, get the associated wire info dialog box
F. Get the rack info/edit/delete dialog box
G. Get the module move/delete dialog box

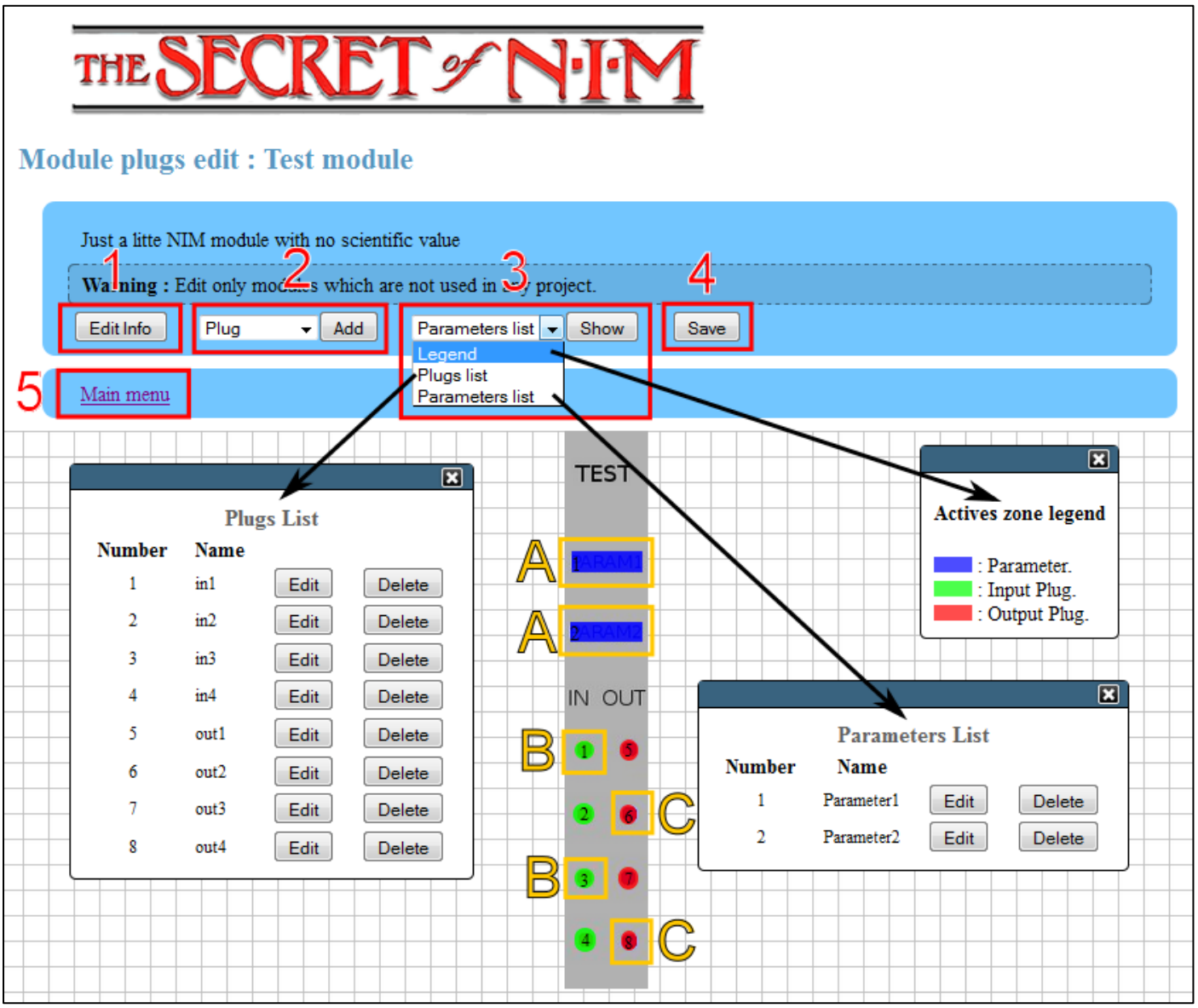
4.4 Module information page

THE SECRET of N·I·M
Add New Module
FIRST PART :
Type the folowing informations :
Module name :
1
Test module
2
Description :
Just a litte NIM module with no scientific value
Module Image :
3
Parcourir...
Aucun fichier sélectionné.
Note :The Module image must be sized to 66x440 pixels before the upload. It will not be resized after the upload (this allows to upload non-standard Modules). Hence, you must be careful with the size of the Module image.
4
Save Module info
5
Main menu

The module information page is a simple page, here are its possibilities:

1. Module name
2. Module description (doesn't support new line and html yet)
3. Module background image (the image that will be shown in the background, you might upload it from your computer. The image will not be resized, then make sure its size is 66x440px, except if you know what you are doing.)
4. Save button (can create the module, if it doesn't exist).
5. Go back to the main menu link.

4.5 Module viewer page



The module viewer page has many functionalities, here there are:

1. Go to the Module information page
2. A menu that can show the dialog box that add a plug (Plug) or a parameter (Parameter)
3. A menu which show the legend, the parameters list or the plugs list (those are three different dialog boxes)
4. A save button (which save the module in .ZIP file format on your disc)
5. Go back to the Main Menu link

There are also some active zones on the page:

A. The parameters (allows you to edit or delete the parameter)
B. The input plugs (allows you to edit or delete the plug)
C. The output plugs (allows you to edit or delete the plug)

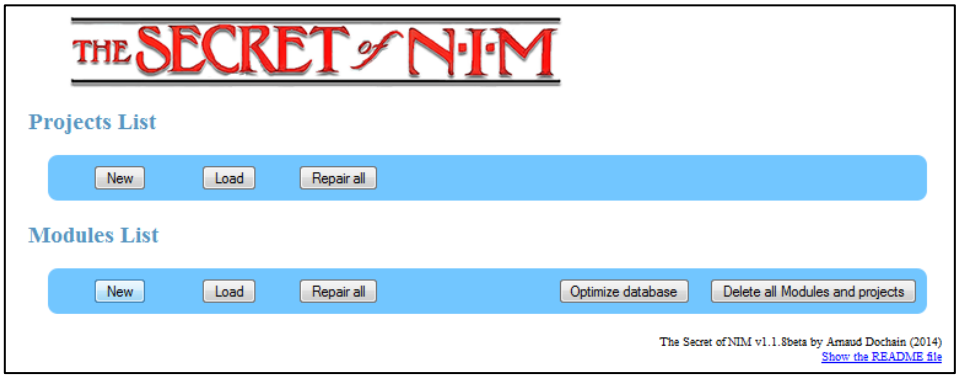
5 Single Module Edition

The module edition is a small utility that allow creating, editing, saving and loading modules. Those modules are the ones that will be used in the other part of the program.

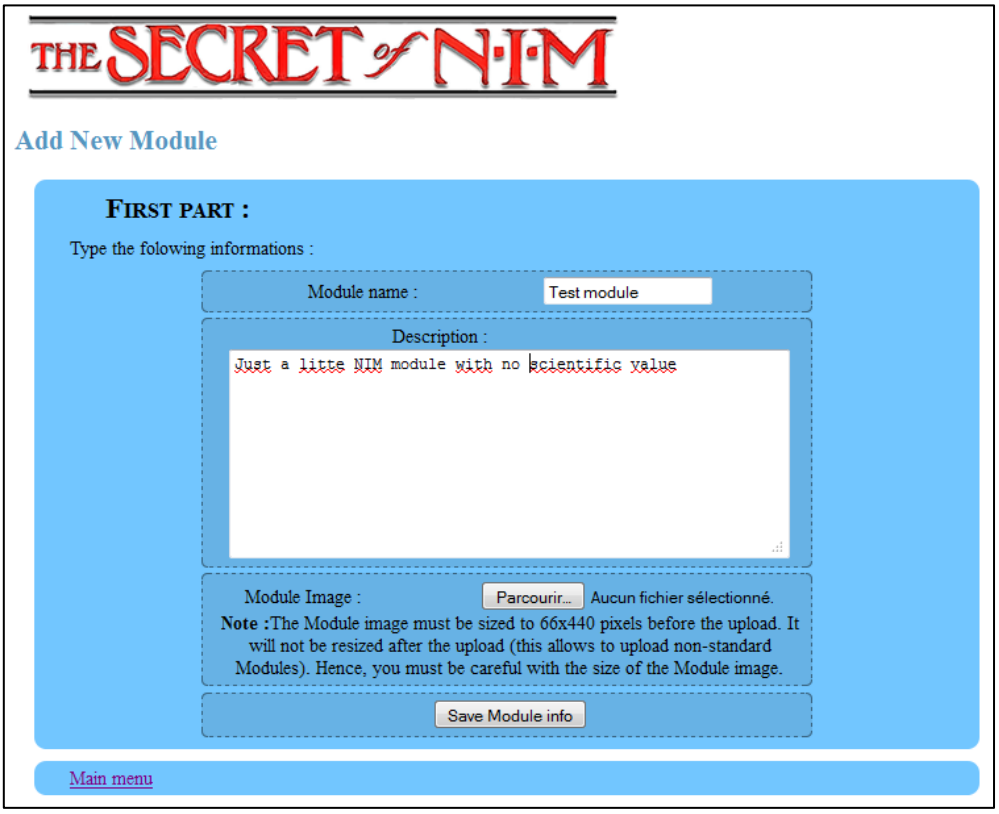
This section will explain all the action possible in the section of the module edition.

5.1 Create a new module/ Edit Module information

The first thing to do when you start is to create a new module. Simply click on the “new” button in the Module List section of the page. If you have already created the module, and you just want to edit its basic information, click on the “Info” button below the name of the module (not shown here). All the others steps are the same.

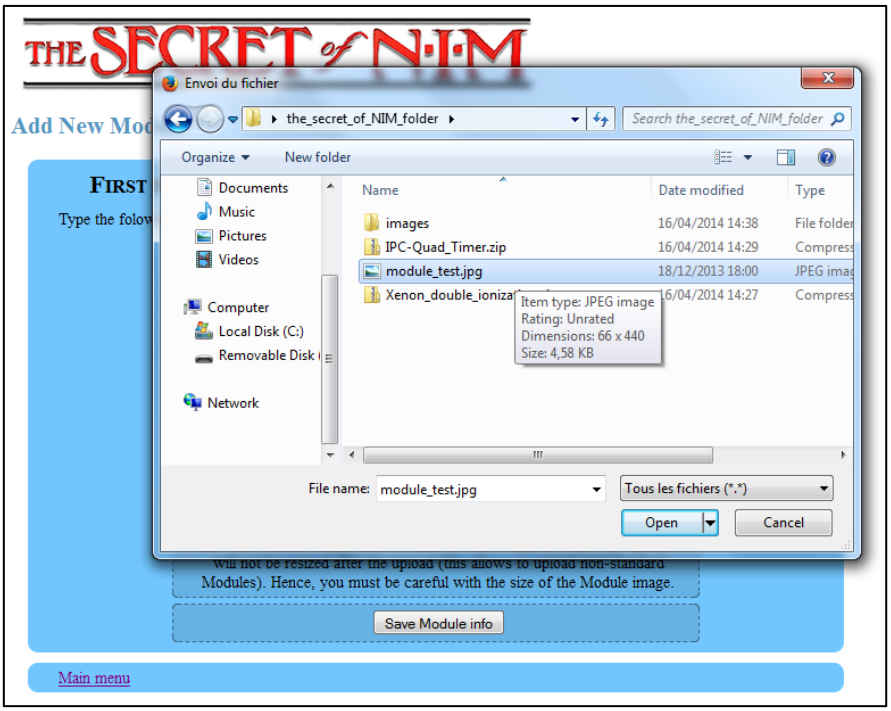


Then you have to insert the name of the module, a small description of it.

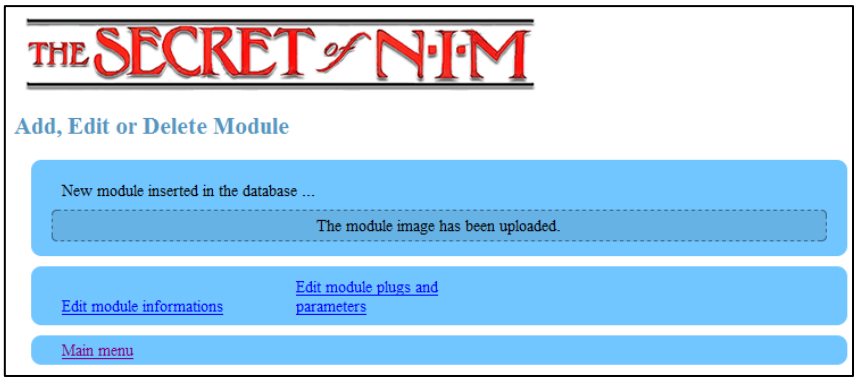

THE SECRET of N·I·M
Add New Module
FIRST PART :
Type the folowing informations :
Module name :
Test module
Description :
Just a litte NIM module with no scientific value
Module Image :
Parcourir...
Aucun fichier sélectionné.
Note :The Module image must be sized to 66x440 pixels before the upload. It will not be resized after the upload (this allows to upload non-standard Modules). Hence, you must be careful with the size of the Module image.
Save Module info
Main menu

Now the most important: An image of the module. The size of this image MUST be 66x440px to fit in a rack (there is no resizing functionality in The Secret of NIM). If you have a larger module, the size may change but keep in mind that the image will not be resized!

The supported image types are PNG, JPEG or GIF.

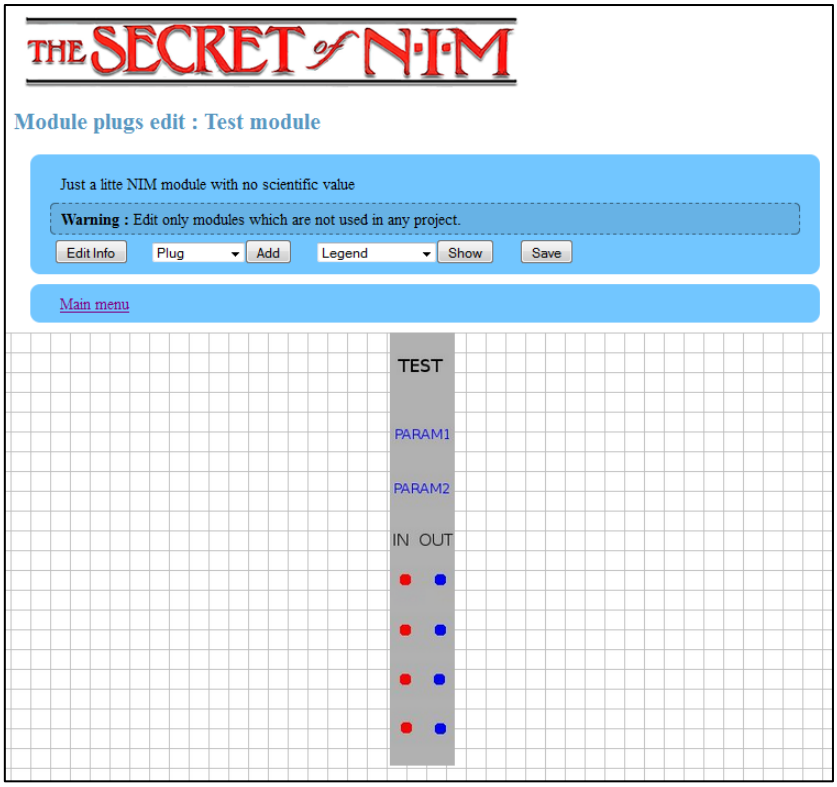


Now you just have to click on the “Save Module Info” button.


THE SECRET of N·I·M
Add, Edit or Delete Module
New module inserted in the database ...
The module image has been uploaded.
Edit module informations
Edit module plugs and parameters
Main menu

The Module is now created; it’s time to add some plugs or parameters on it. Simply click on the “Edit module plugs and parameters” link.

If you are not satisfied with the name, the description or the image of the module you can click on the “Edit module information” link.

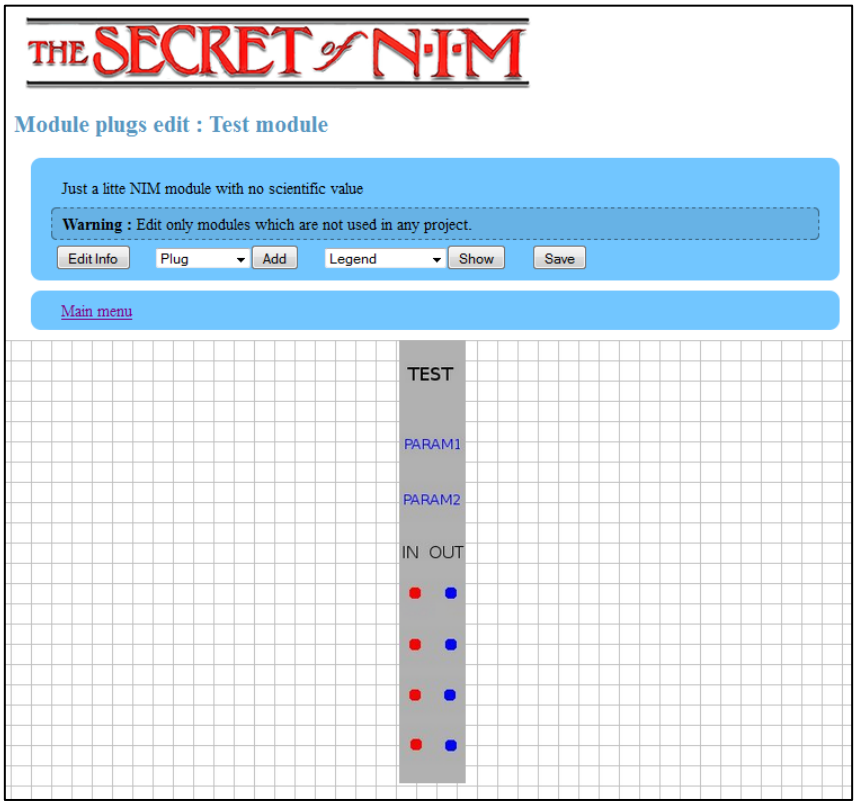


Here it is, the next part of the module editing!

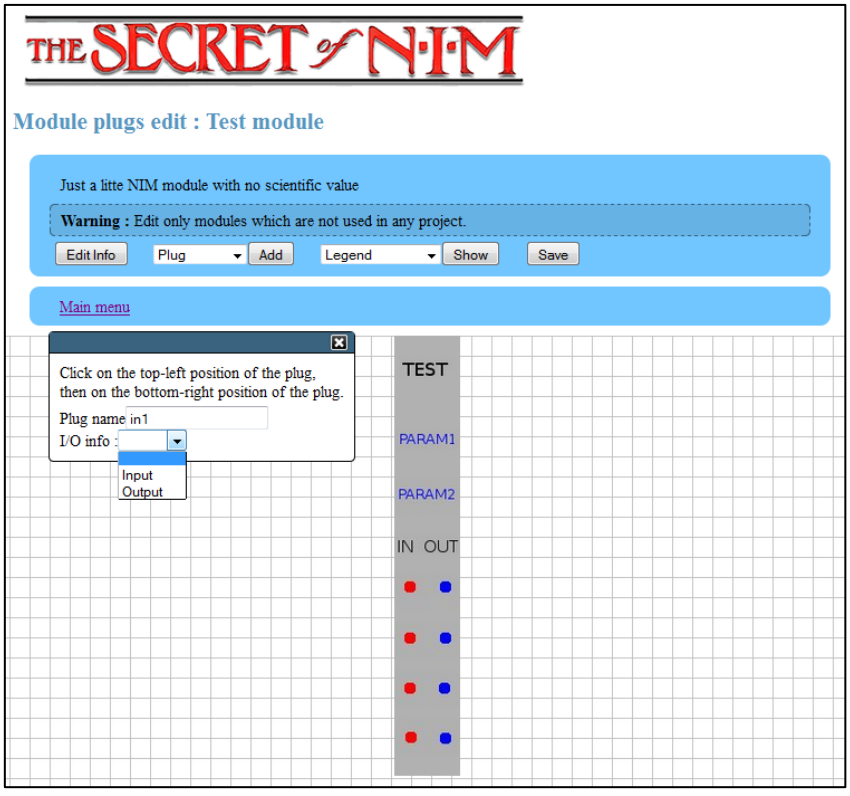
You can always edit the module information, just click on the “Edit Info” button.

5.2 Adding a plug

To add a new plug, first select plug on the menu on the right of the “Edit Info” button, and click on the add button.



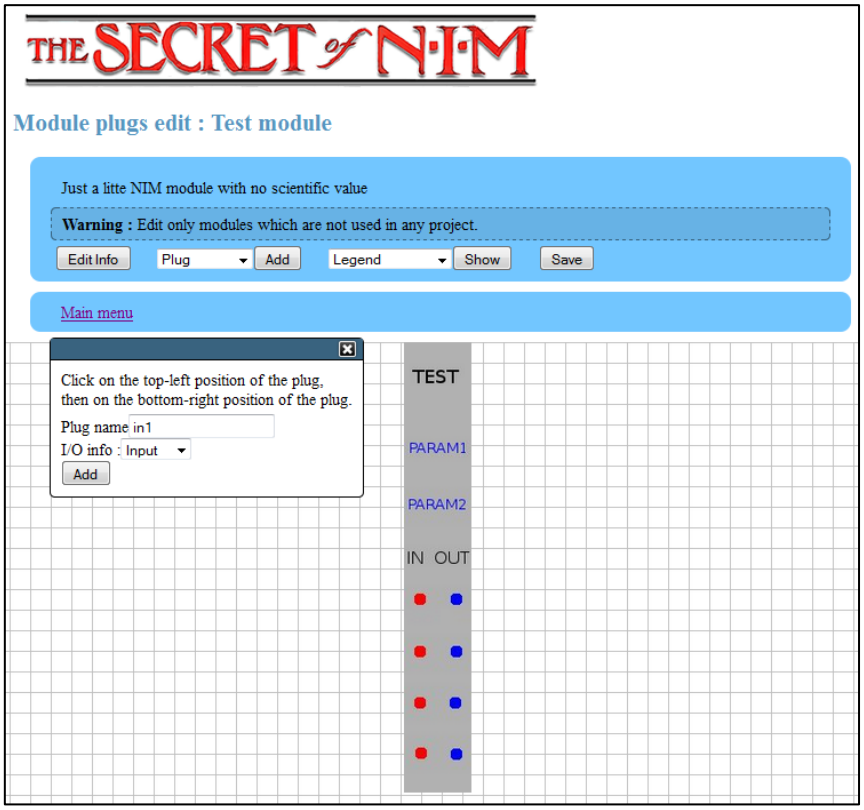
Give a name to the plug, and say if it’s a input or an output.



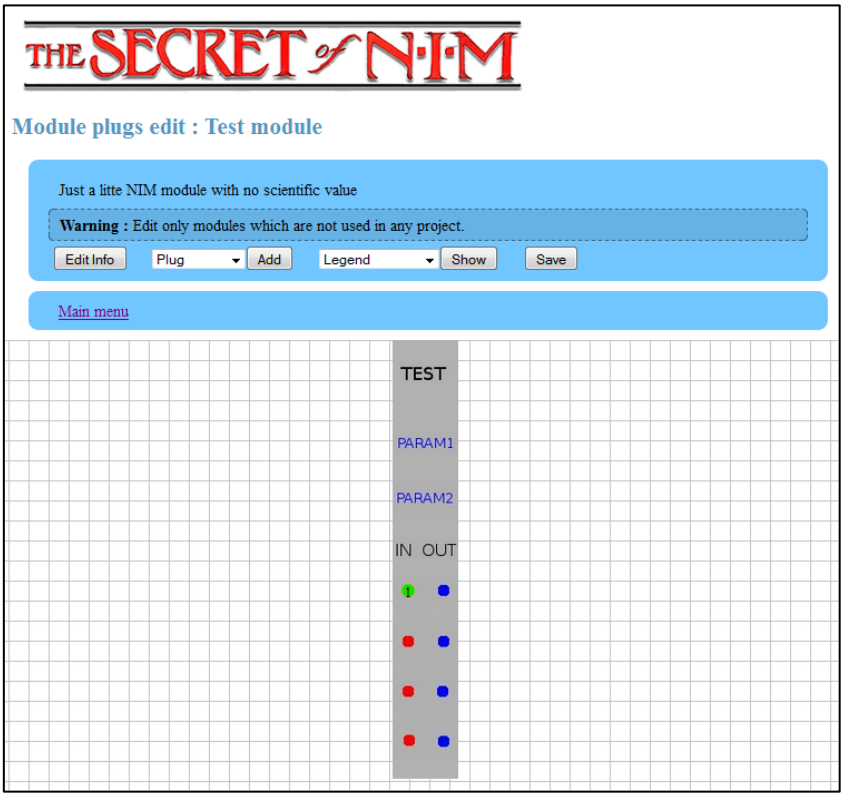
Then you have to choose where the plug will be. To do this, click on the top left of the plug, and then on the bottom right of it.

Be careful, even if the drawing of the plug is circular, the box of the plug is a square, so you have to click on the top-left and the bottom right of the square, not the circle.

Once you have selected the top-left position and the bottom-right of the plug, a “Add” button appear on the dialog box. Click on it to save the plug.

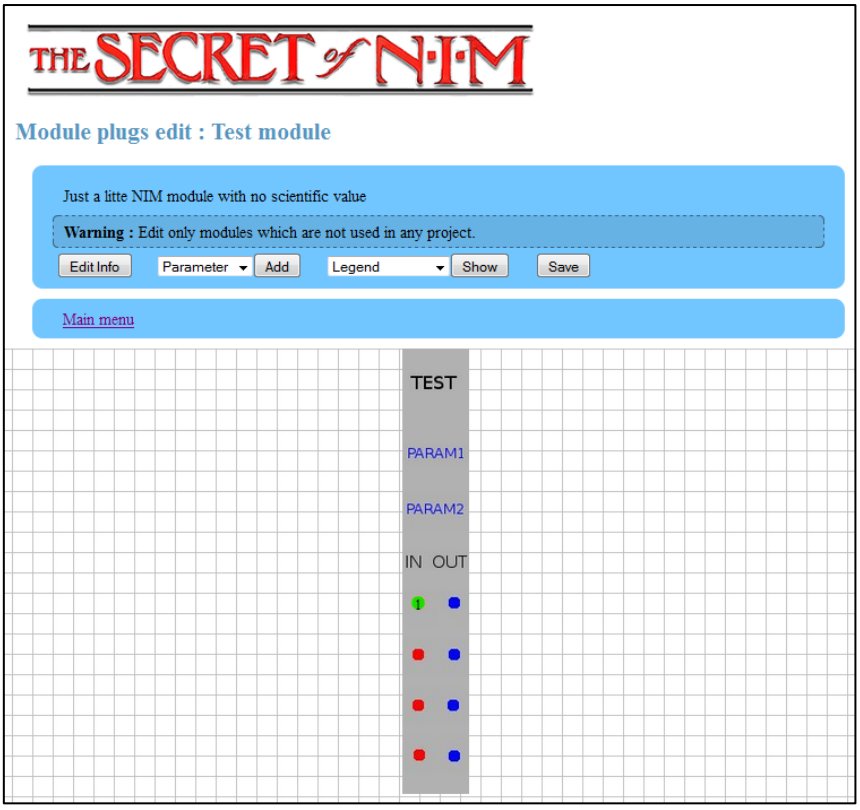


Here it is, a new plug appear on the module.

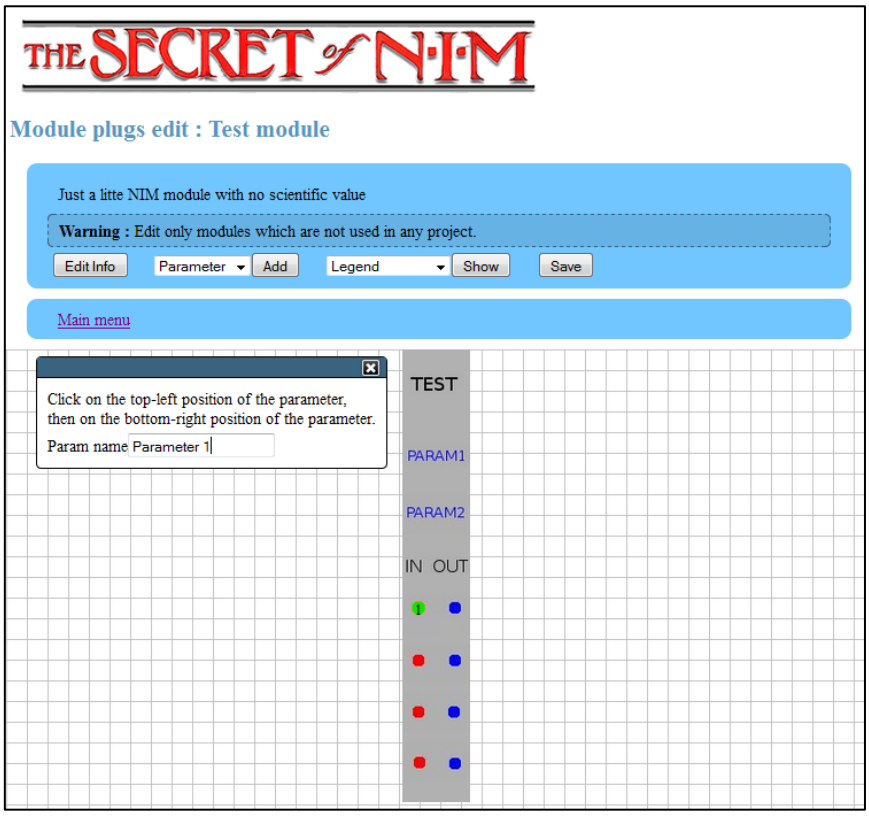


5.3 Adding a parameter

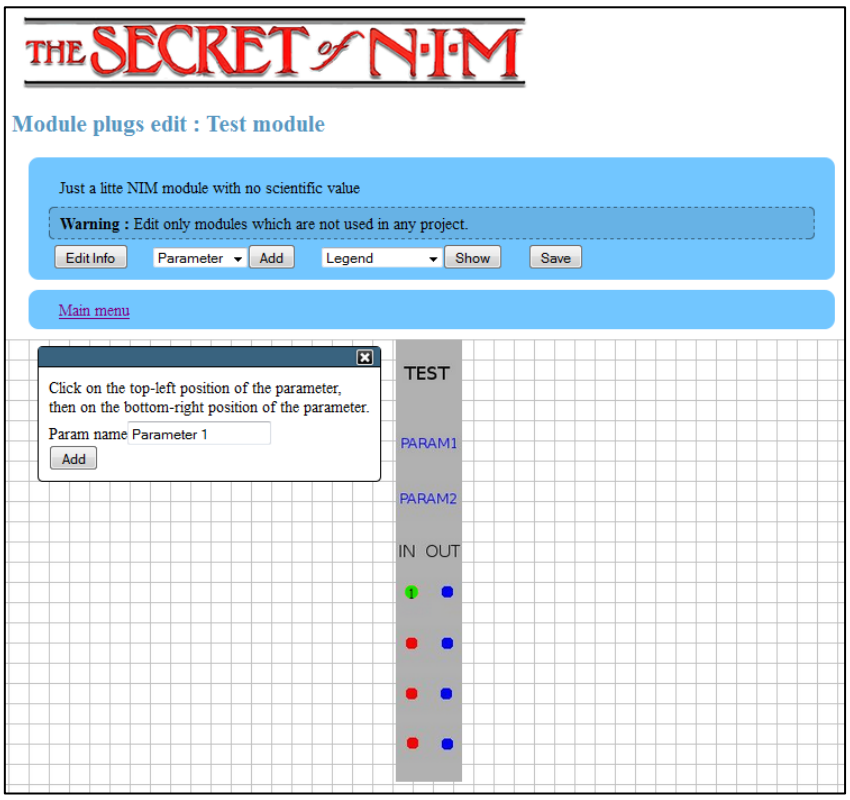
The method used to add a parameter on the module is similar to the method used to add a plug on the module. You first have to select “Parameter” in the menu on the right of the “Plug Info” button, and then click on the “Add” button.



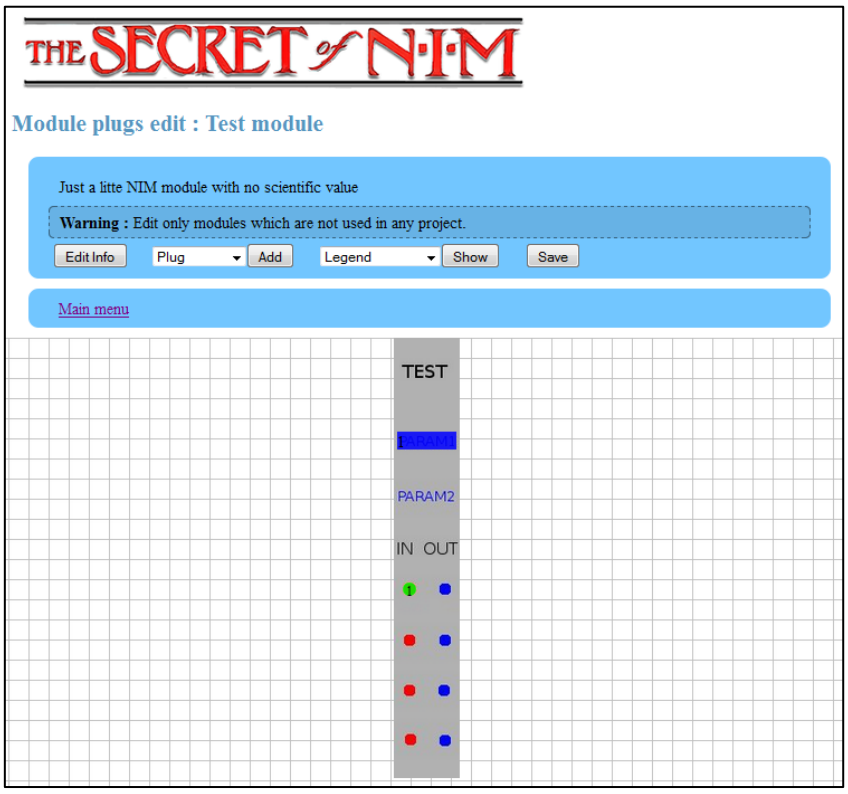
Then you have to choose the name for the parameter.



After that, you have to select the position of the parameter. The method is similar to the method used for the plug, except that parameters are rectangular, and plugs are circular. You also have to click on the top-left of the parameter then on the bottom-right of that parameter.



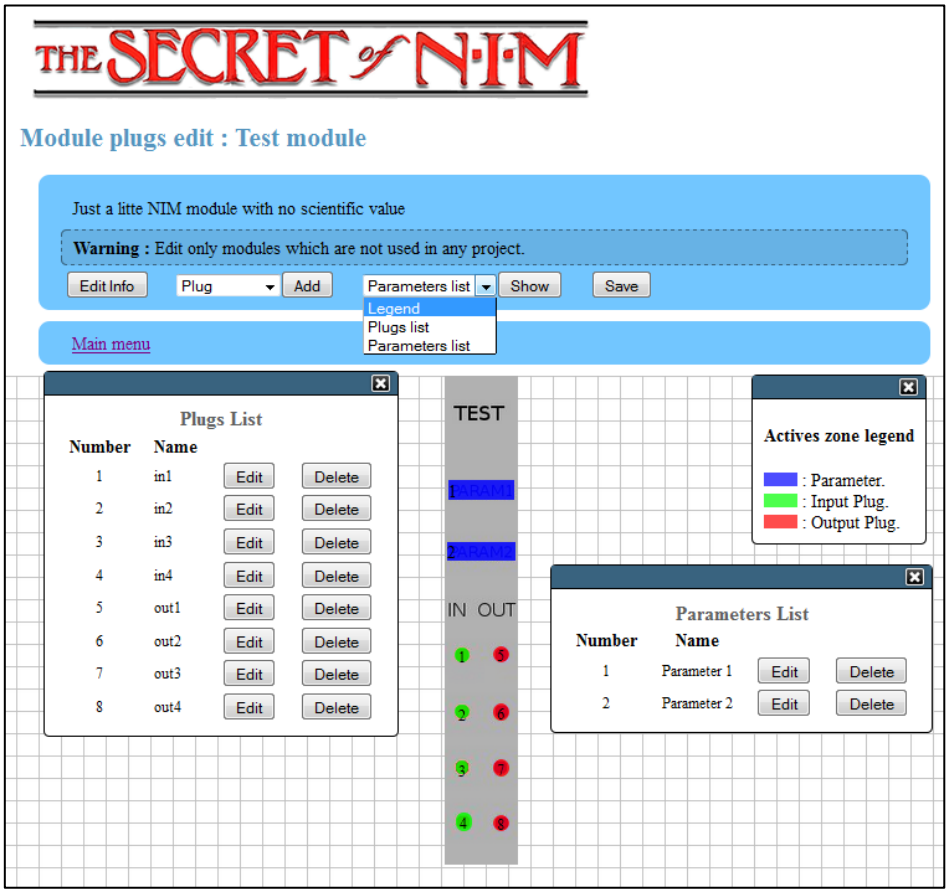
Once it's done, an "Add" button appear, simply click on it to create the parameter. The parameter now appear on the module.



5.4 Show legend, Parameters List and Plugs List

If you want to see all the parameters of the module or all the plugs of the module, the method is the following: Select “Plug list” or “Parameters list” on the menu on the left of the “Show” button, and then click on that button. The associated dialog box will be shown. Those dialog boxes can be used to edit and delete a plug or a parameter, as it will be shown later on this manual.

If you want to remember which color corresponds to which kind of plug or parameter, you can show a legend. The method is the same as above: Select “Legend” on the menu on the left of the “Show” button, and then click on that button.



If you want to see the information of only one parameter, or only one plug, you simply have to click on it, a small dialog box will appear, and allows you to edit the plug or the parameter (not shown on the print screen above).

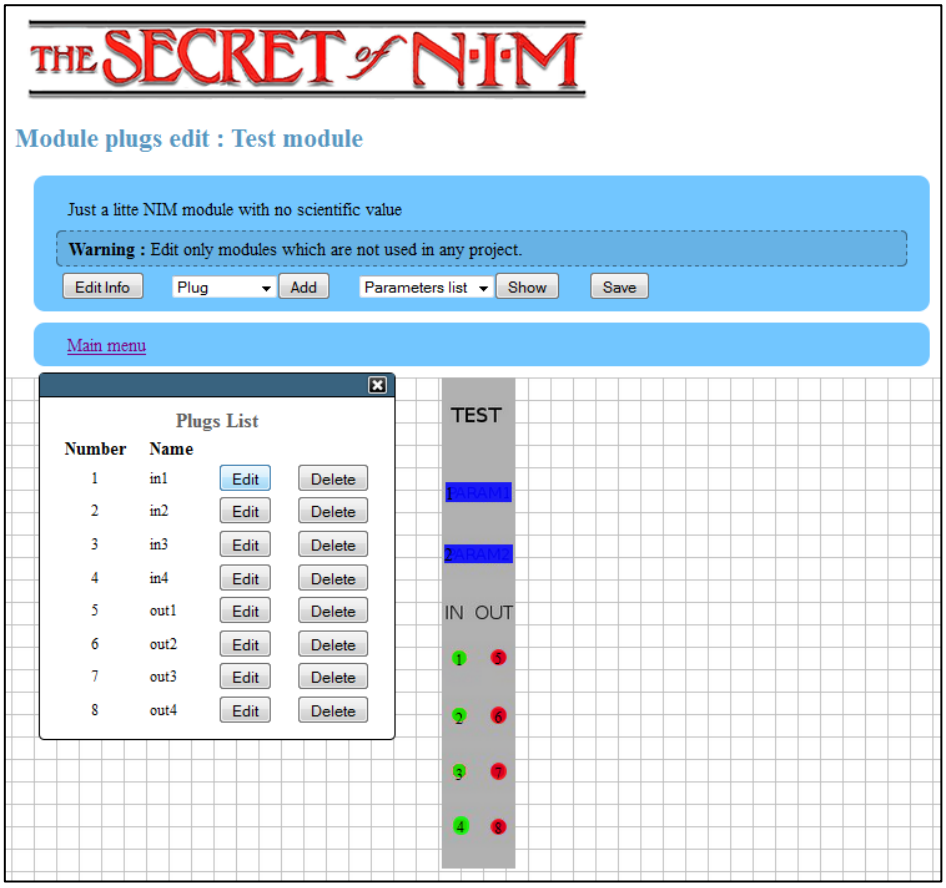
5.5 Edit plugs and parameters

There are two methods to access the plugs or parameters editing dialog box: Using the “Plugs/Parameters List” or by clicking on the plug/parameter itself. Both methods will be shown, but they are very similar.

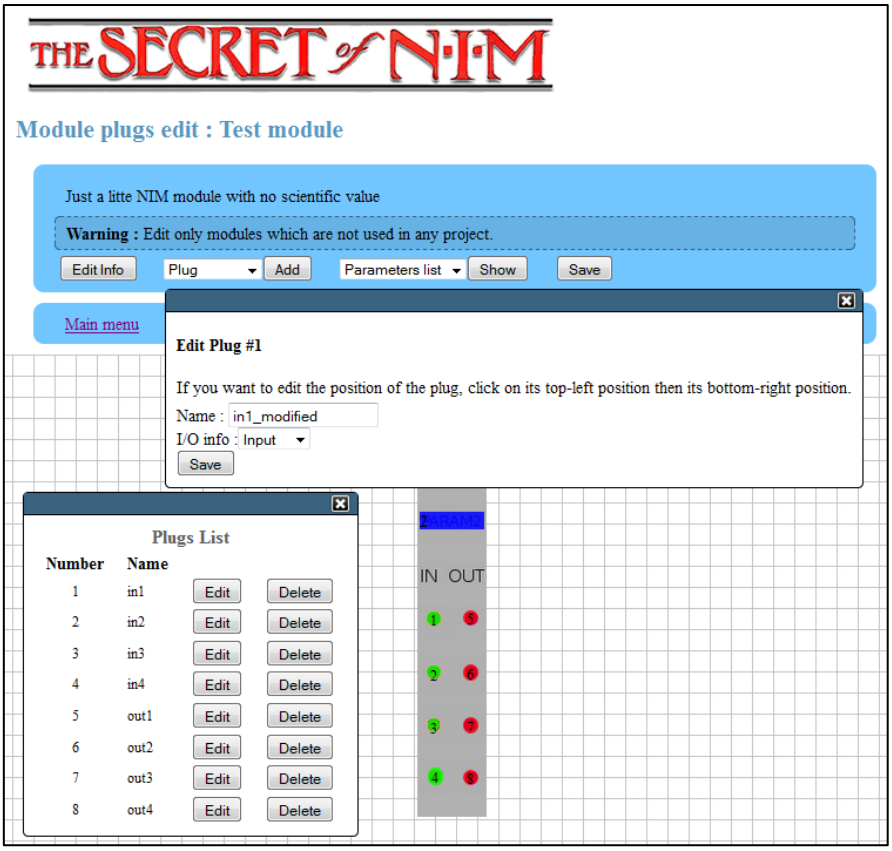
The methods used to edit plugs or parameters are very similar. Only the one for the plugs will be shown, but it also applied to the module parameters.

5.5.1 First method: Using the List

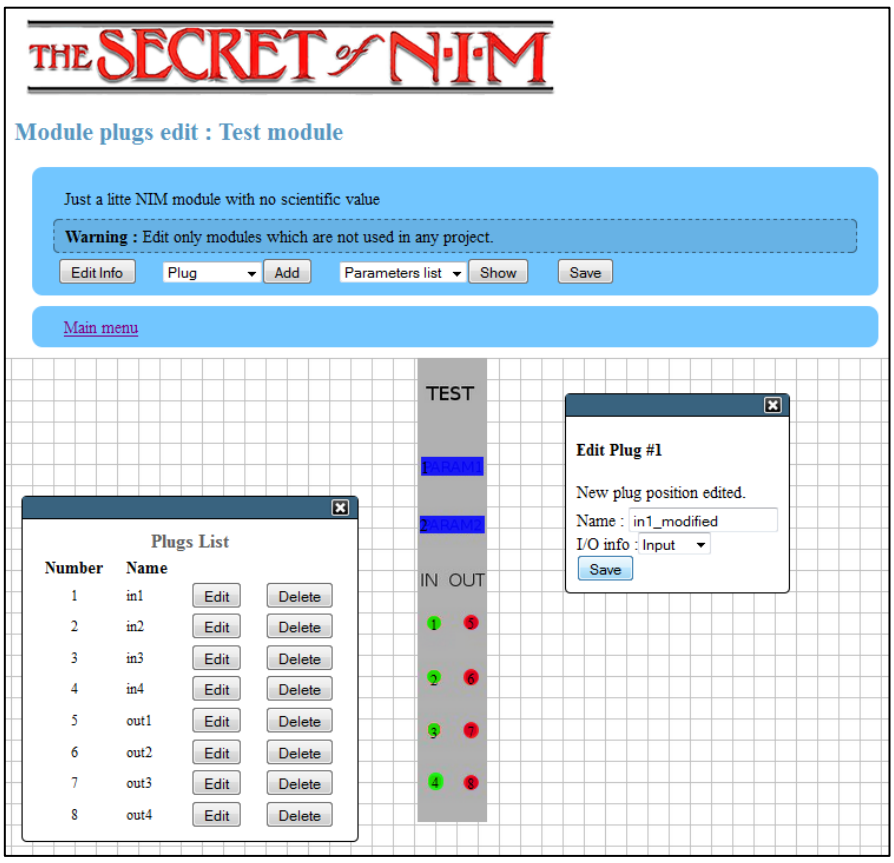
Once you have shown the “Plug List” dialog box, click on the “Edit” button associated to plug you want to edit.



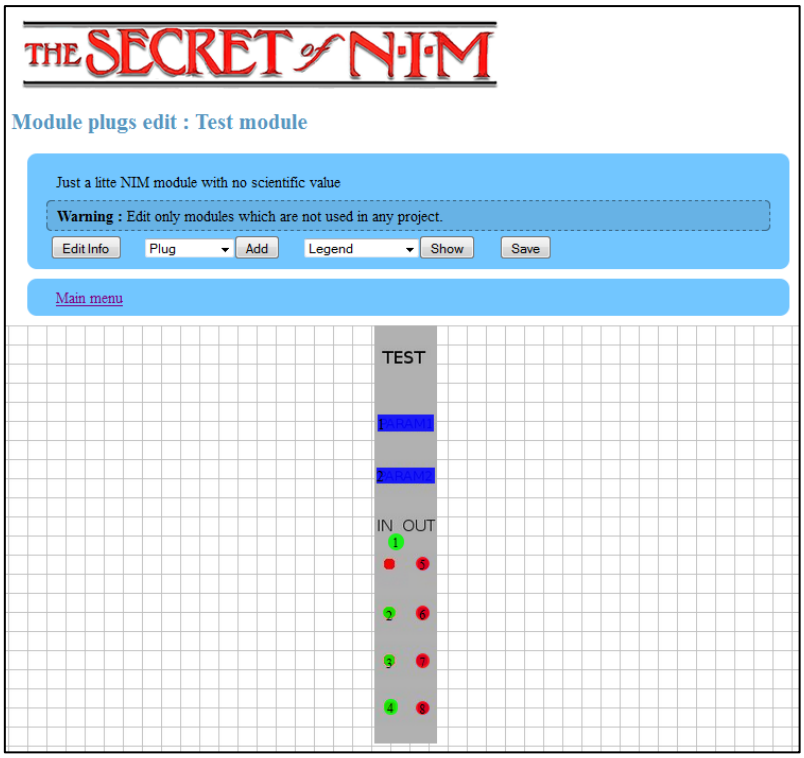
A new dialog box appears (“Edit Plug #”). The way to edit a plug is the same as the way used to add a plug, you can edit the name of the plug, select if it’s a input or an output and if you want, you can edit the position of the plug.


THE SECRET of N·I·M
Module plugs edit : Test module
Just a litte NIM module with no scientific value
Warning : Edit only modules which are not used in any project.
Edit Info
Plug
Add
Parameters list
Show
Save
Main menu
Edit Plug #1
If you want to edit the position of the plug, click on its top-left position then its bottom-right position.
Name : in1_modified
I/O info : Input
Save
Plugs List
Number Name
1 in1 Edit Delete
2 in2 Edit Delete
3 in3 Edit Delete
4 in4 Edit Delete
5 out1 Edit Delete
6 out2 Edit Delete
7 out3 Edit Delete
8 out4 Edit Delete
IN OUT

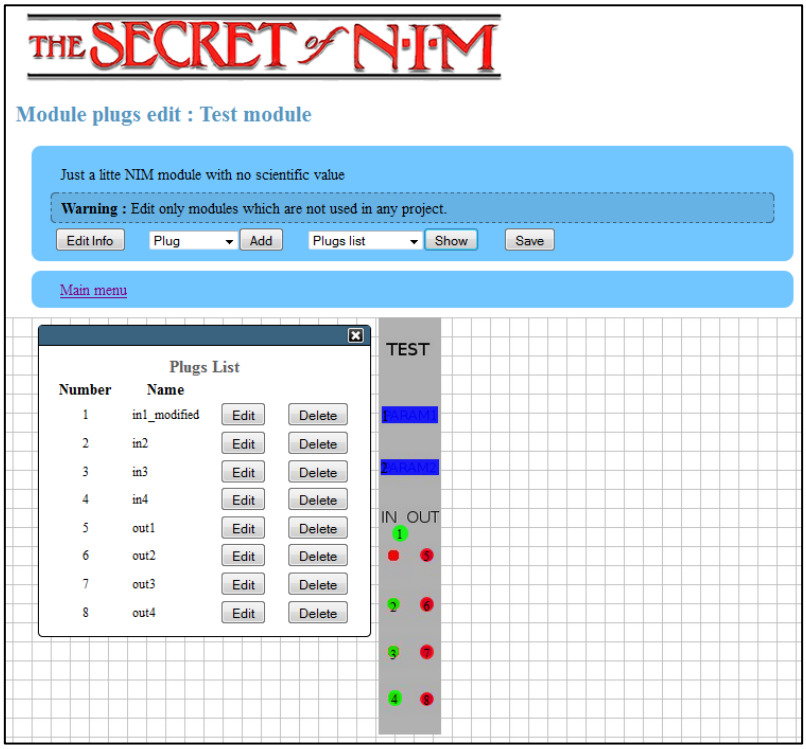
Note that you can just edit the name of the plug. If you don't click on the top-left, bottom-right of the new position of the plug, its position will not change. You just have to save without editing the position (click on the "Save" button").



Once you have clicked on the “Save” button, the change will appear. In this example, the position has been changed; note that the number of the plug is the same as before.

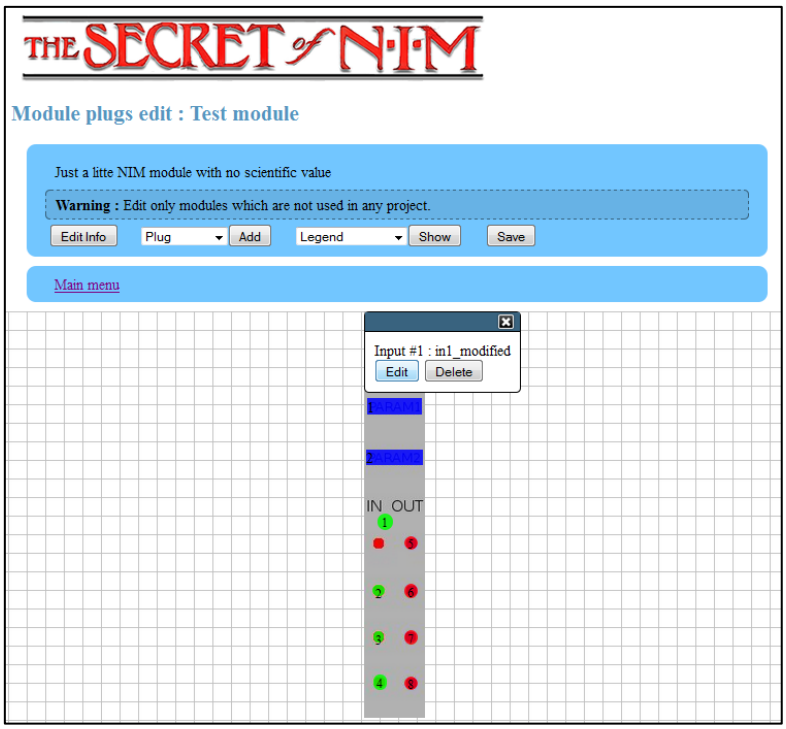


You can convince yourself by showing the “Plug List”, the name has also changed.



5.5.2 Second method: By clicking on the plug

This method is the same as before, you can just access to the “Edit Plug #” dialog box by clicking on the plug, then click on the “Edit” button of that dialog box. Then the same “Edit Plug #” dialog box appears. Just follow the instruction of the section above this one.



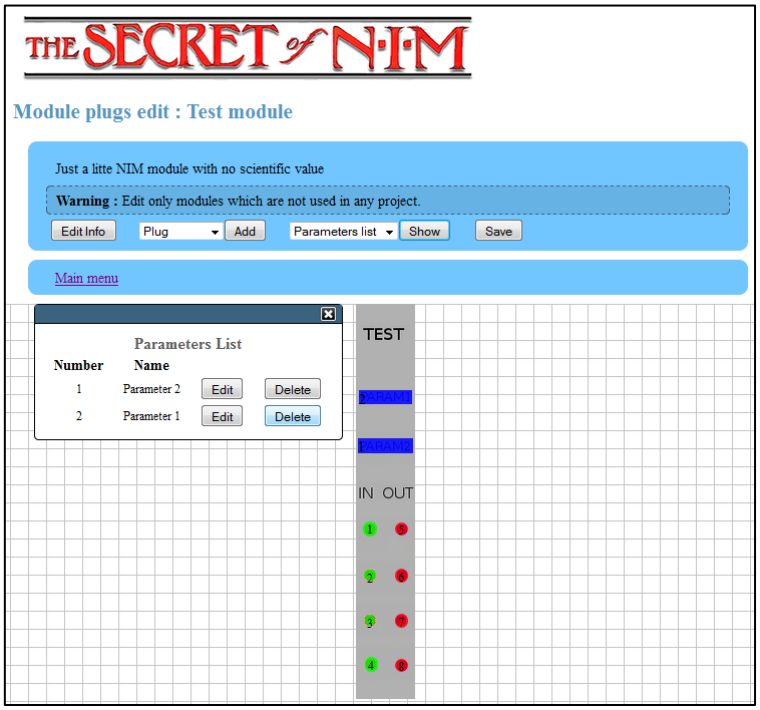
5.6 Delete plugs and parameters

There are two methods to delete plugs or parameters: Using the “Plugs/Parameters List” or by clicking on the plug/parameter itself. Both methods will be shown, but are very similar.

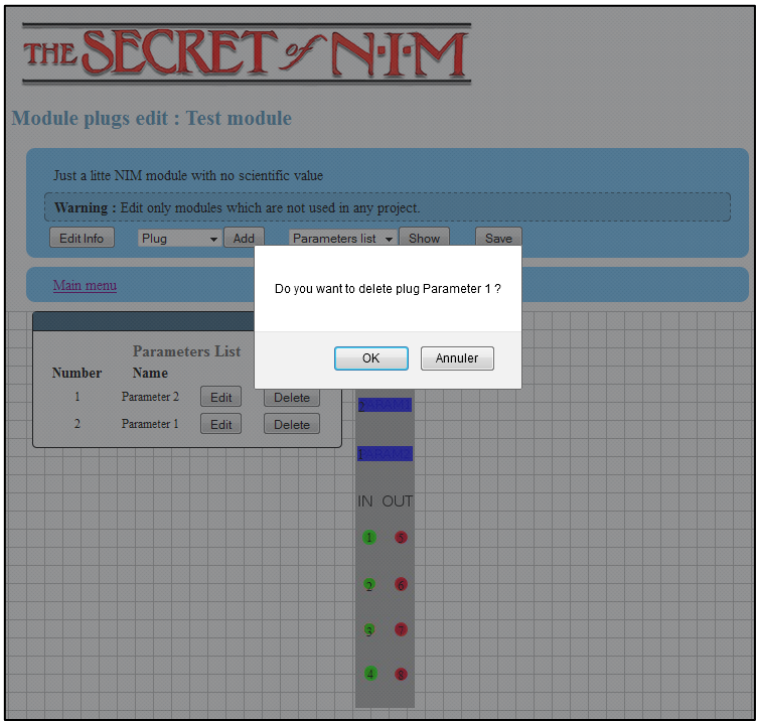
The methods used to edit plugs or parameters are very similar. Only the one for the parameters will be shown, but it also applied to the module plugs.

5.6.1 First Method: Using the Parameters List

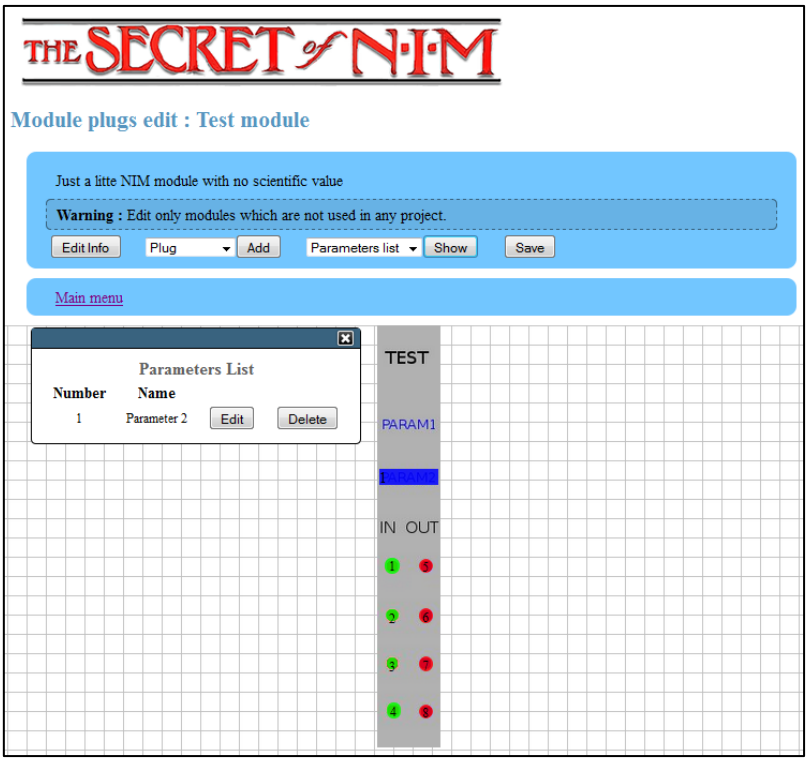
The first step is to show the parameters list, then clicking on the “Delete” button associated to the parameter you want to delete.



Confirm your choice.

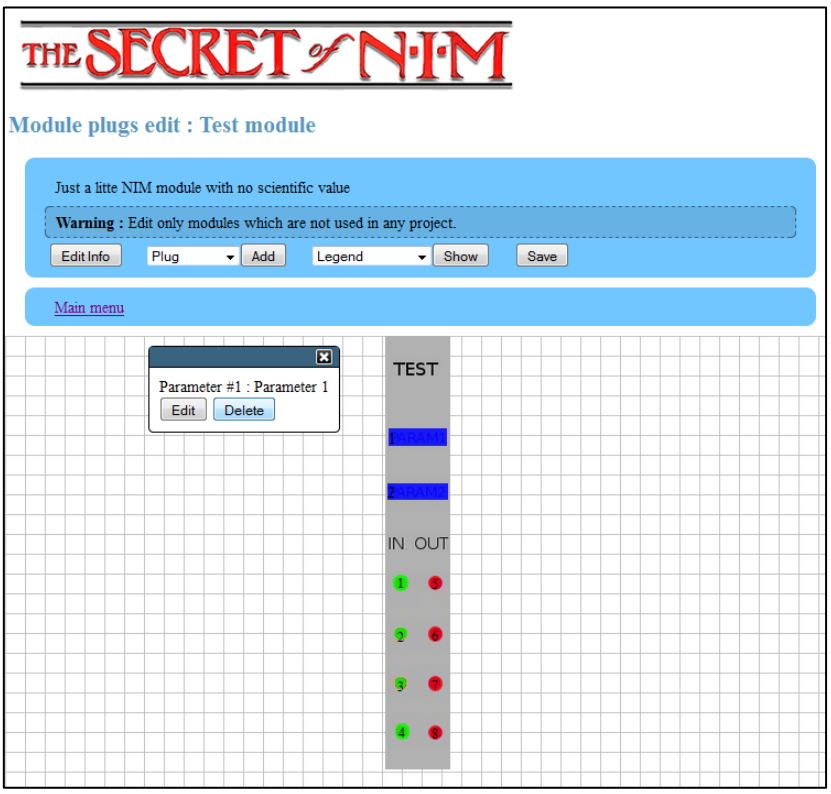


Now the parameter is deleted.

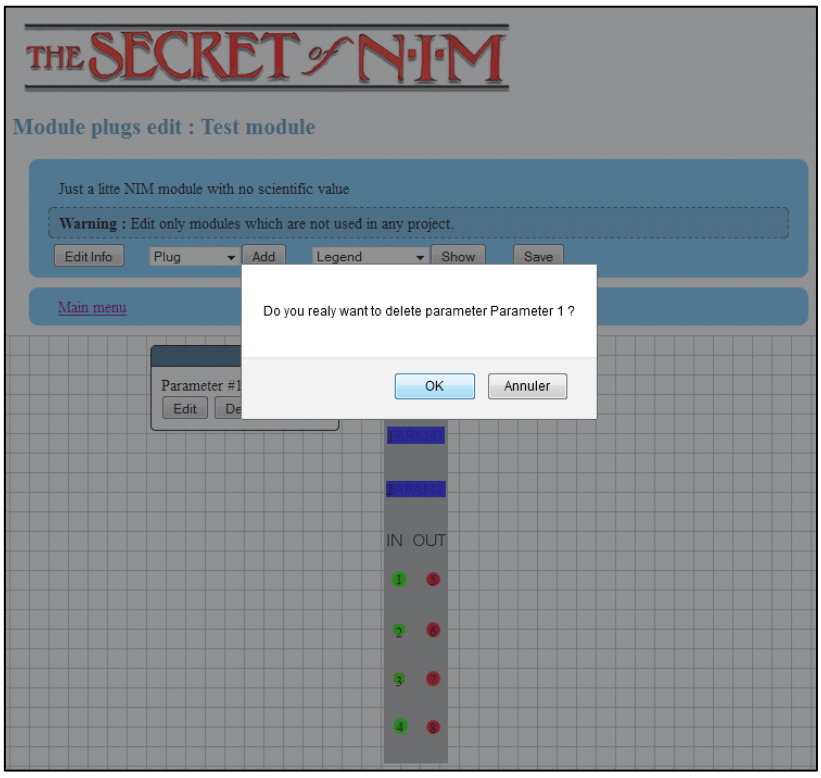


5.6.2 Second Method: Clicking on the parameter

First click on the parameter you want to delete, a small dialog box appears, click on the “Delete” button.



Confirm your choice



The parameter is now deleted.

5.7 Save module on disc

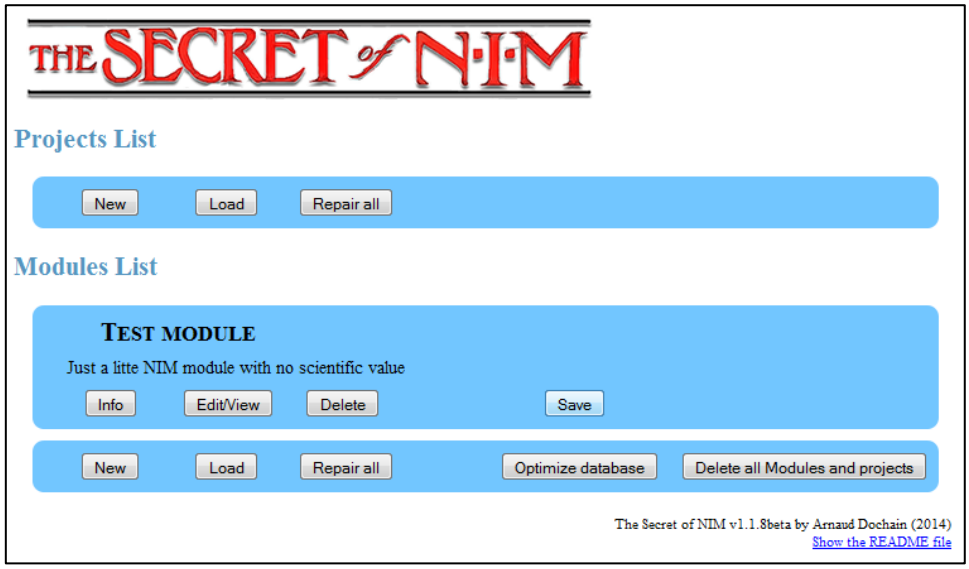
Once you have created a module, with all its plugs and parameters, you don't want to do that again. Fortunately, *The Secret of NIM* allows saving modules on the computer as a ZIP file, and load them on another server, if you have deleted it, to load it again.

Some modules which have already been implemented can be found in the folder "modules" of the program.

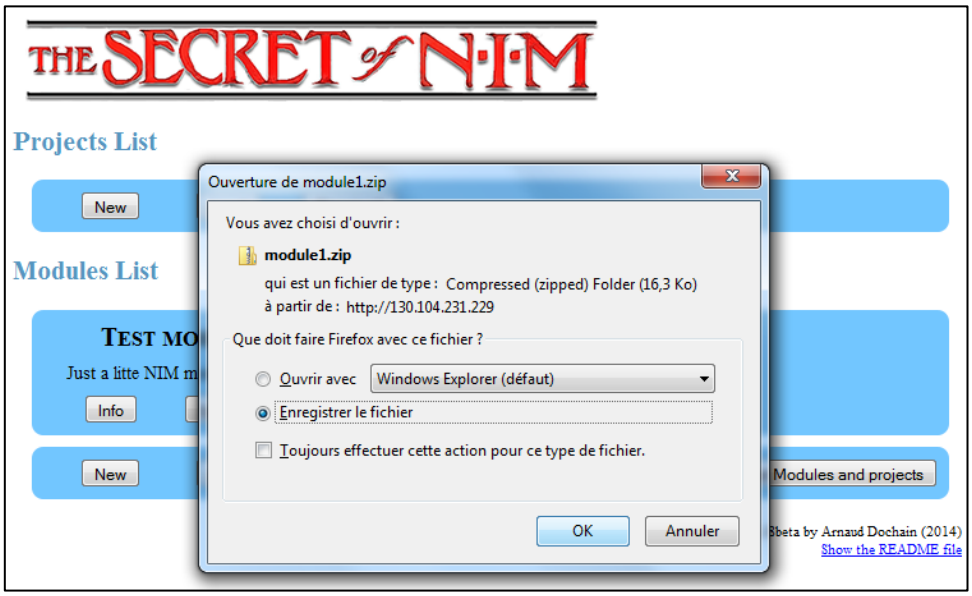
There are two methods to save modules; those are very similar, even if both are presented here.

5.7.1 First method: Using the Main Menu

Go to the main menu, and click on the "Save" button associated to the module you want to save.



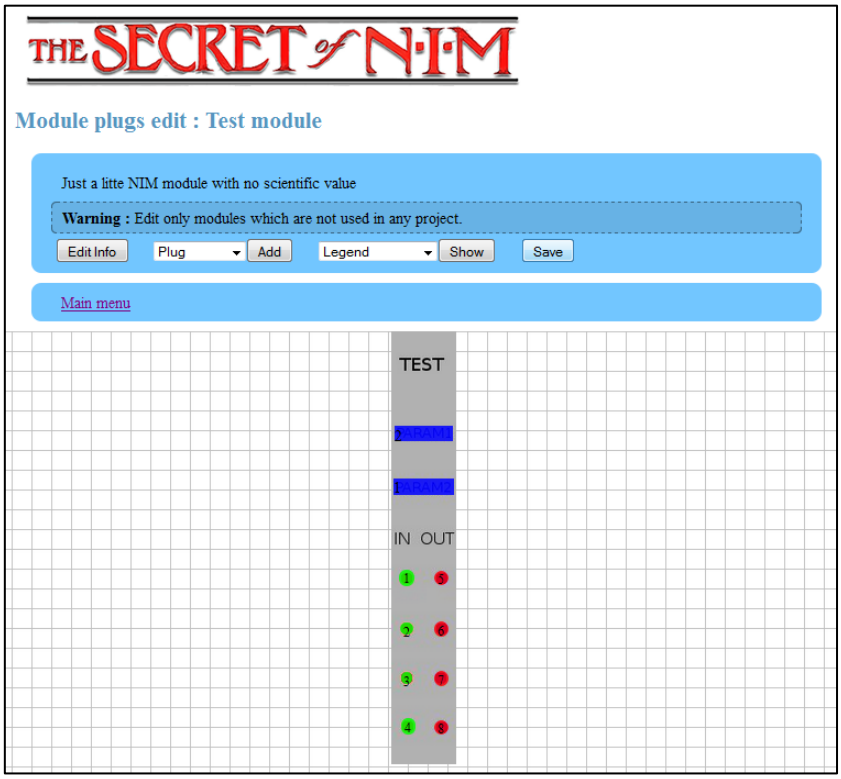
Now, you have to choose where you want to save it on disc.



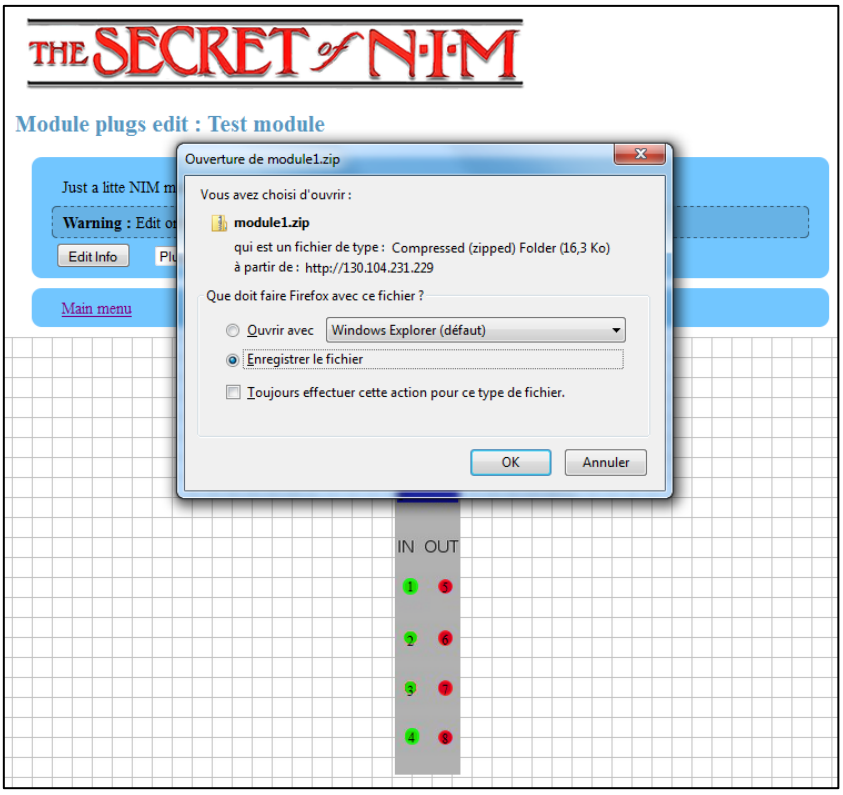
That's it.

5.7.2 Second method: Using the Module Editor

When you are in the module editor section, you can also save the module on the disc. Again, you just have to click on the “Save” button.

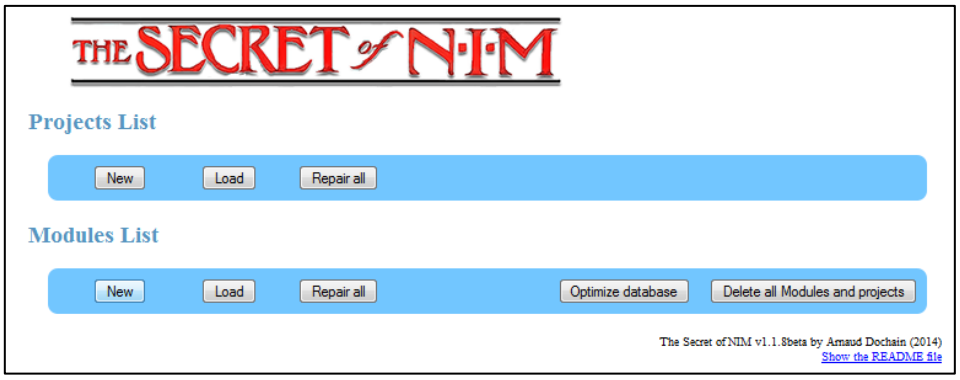


Then choose where you want to save it on the disc.

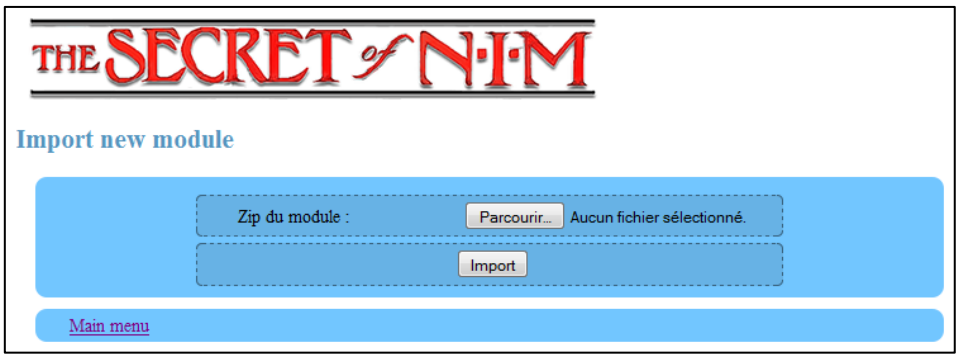

THE SECRET of N·I·M
Module plugs edit : Test module
Ouverture de module1.zip
Vous avez choisi d'ouvrir :
module1.zip
qui est un fichier de type : Compressed (zipped) Folder (16,3 Ko)
à partir de : http://130.104.231.229
Que doit faire Firefox avec ce fichier ?
Ouvrir avec
Windows Explorer (défaut)
Enregistrer le fichier
Toujours effectuer cette action pour ce type de fichier.
OK
Annuler
Main menu
IN OUT

5.8 Load module

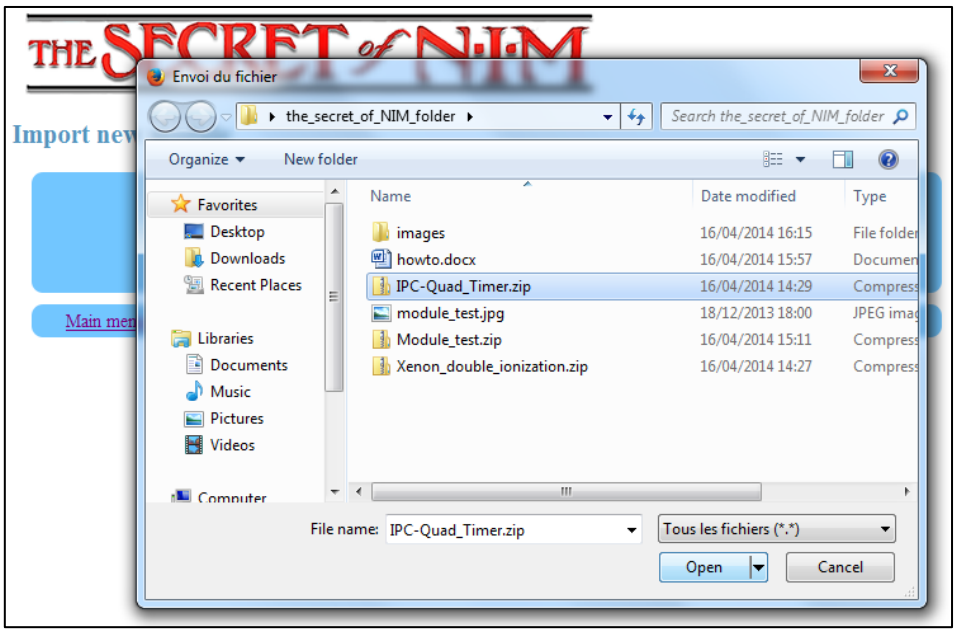
As you have saved some module on the disc, you can load some that has already been implemented. All you have to do is to click on the “Load” button in the Modules List section when you are on the Main Menu.



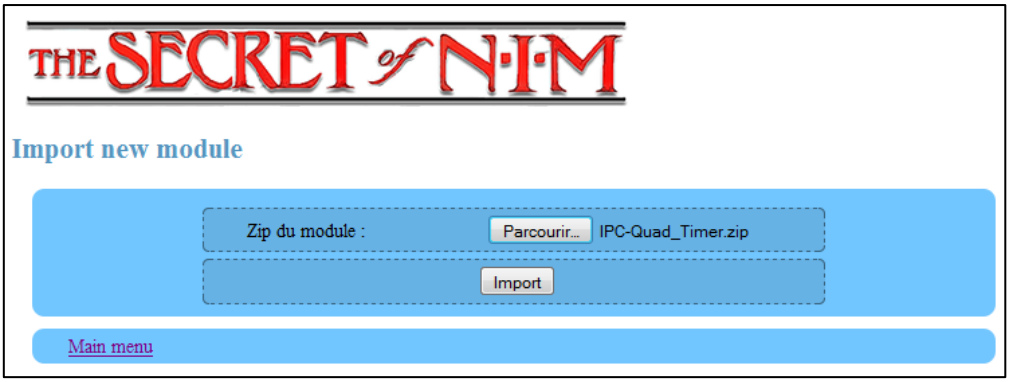
This will open a new page…



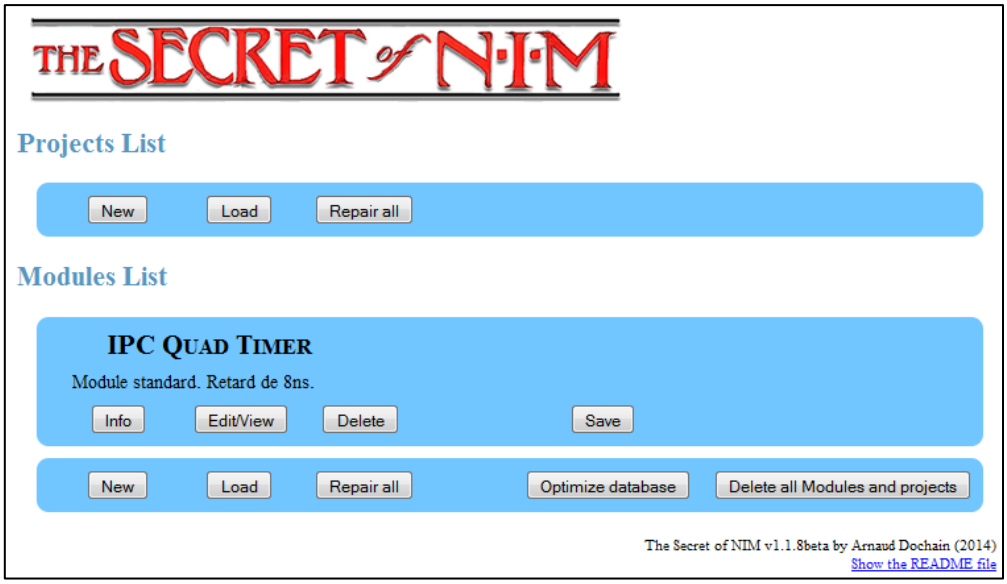
Then you have to select the ZIP file of the module you want to load. Here a Quad Timer.



Finally, you only have to click on the “Import” button.

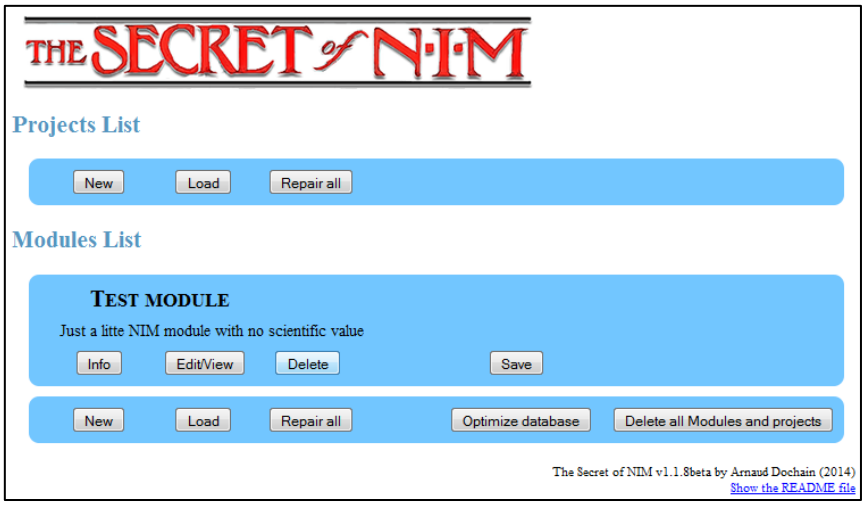

THE SECRET of N·I·M
Import new module
Zip du module :
Parcourir...
IPC-Quad_Timer.zip
Import
Main menu

And that's it…


THE SECRET of N·I·M
Projects List
New
Load
Repair all
Modules List
IPC QUAD TIMER
Module standard. Retard de 8ns.
Info
Edit/View
Delete
Save
New
Load
Repair all
Optimize database
Delete all Modules and projects
The Secret of NIM v1.1.8beta by Arnaud Dochain (2014)
Show the README file

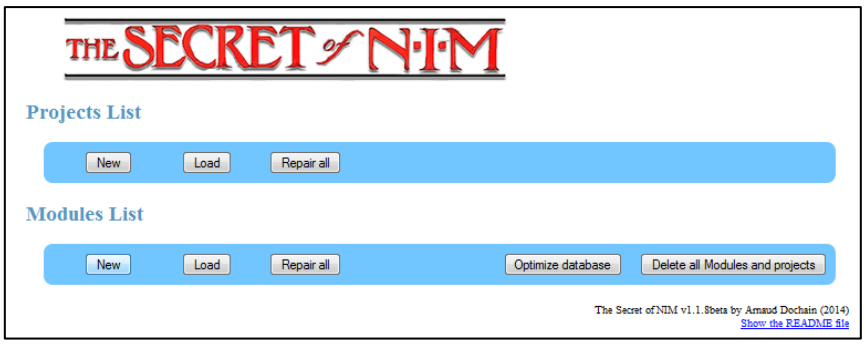
5.9 Deleting module

The last things you can do with only module is deleting them. The method is really simple: Click on the “Delete” button associated to the module you want to delete.



Then confirm.

That’s it…

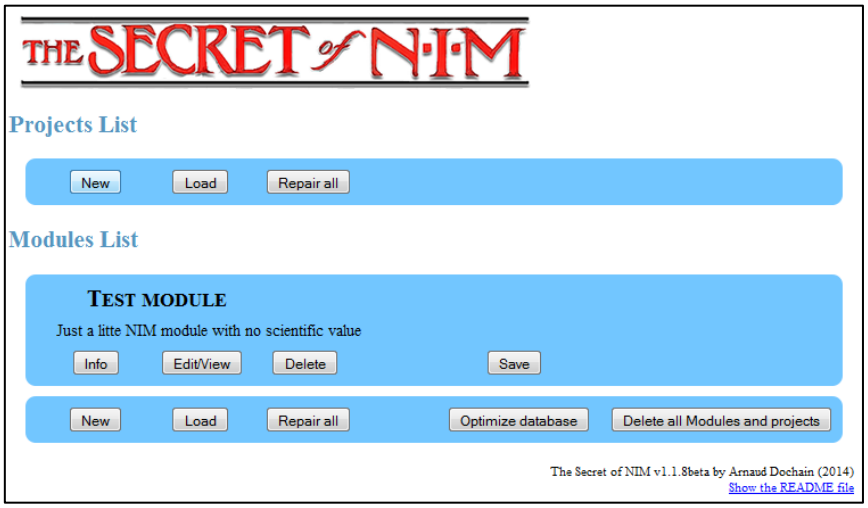


6 Projects Edition

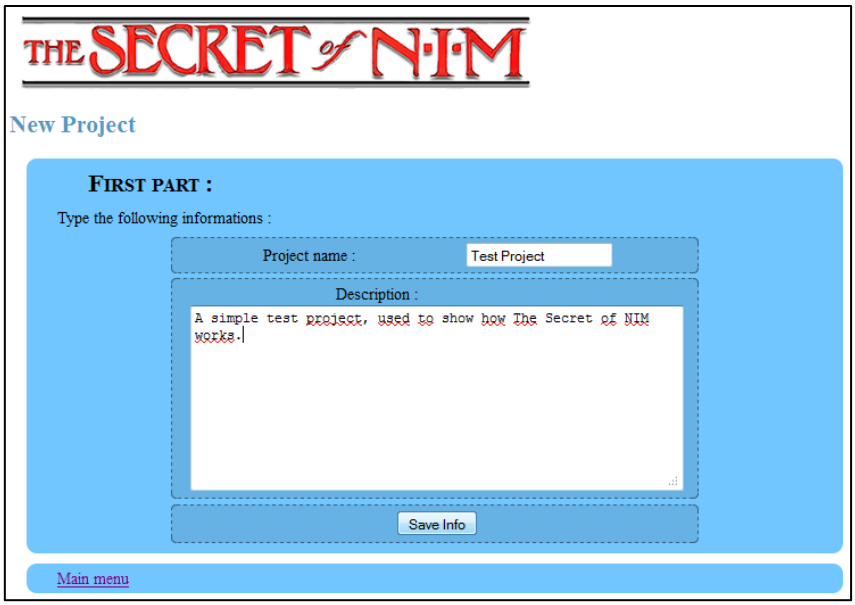
In this section, we will see most of the possibilities that offers The Secret of NIM. We will see how to add, edit, save, load and delete project. How the wiring works, the modules can be set and unset, how to move objects on the screen, how to get a "printable" version of the wiring and many other possibilities…

6.1 Creating a new project/Editing project information

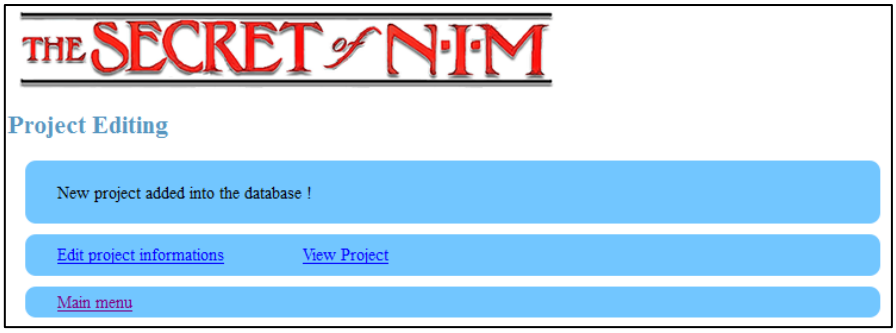
The first thing to do when you start is to create a new project. Simply click on the "new" button in the Project List section of the page. If you have already created the project, and you just want to edit its basic information, click on the "Info" button below the name of the project (not shown here). All the others steps are the same.



You will get to a new page, where you have to enter the name of the project and a description of it. And click on the "Save Info" button.

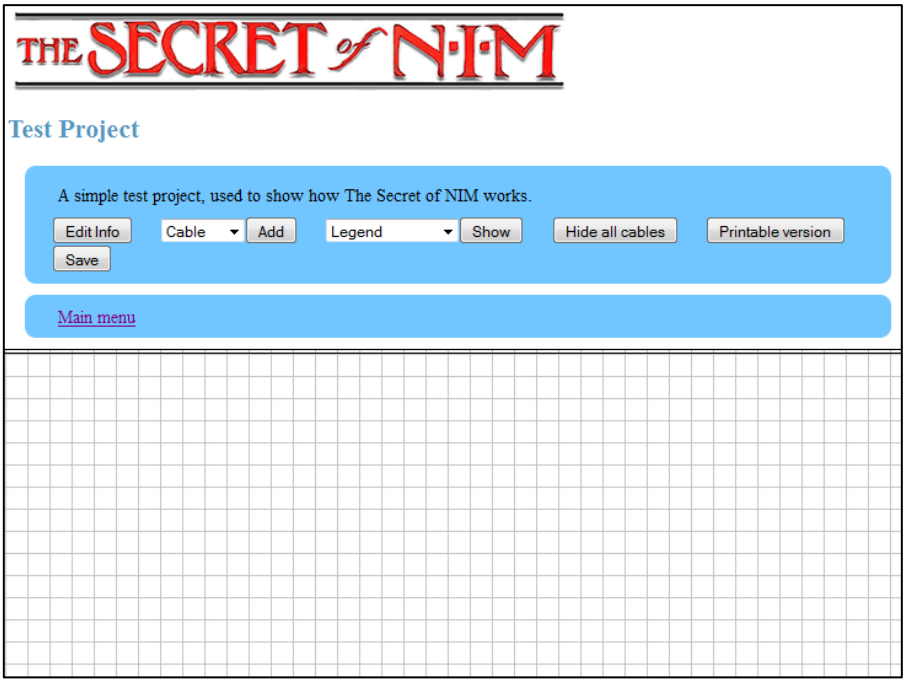


The project has been created! You have now two possibilities: You like the project name and its description then you can click on the "View Project" link and start to add stuffs to the project; or you aren't satisfied of it, and then you click on the "Edit Project Information" link, and come back to the screenshot above.



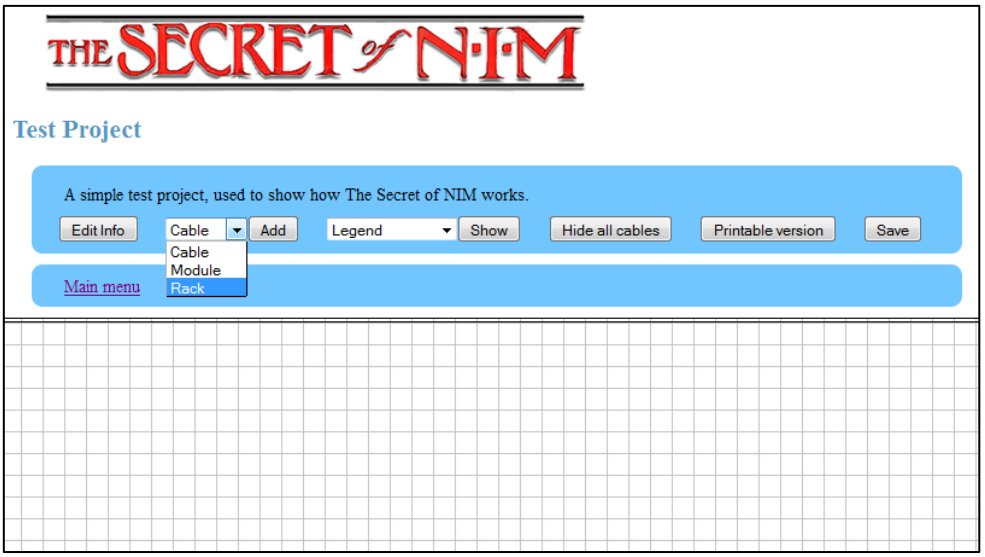
If you have clicked on the “View Project” link, you will arrive to the Edition Page of the Project.

You can also access to this page when you are on the Main Menu by clicking on the “Edit/View” button associated to the project.



6.2 Adding a new rack

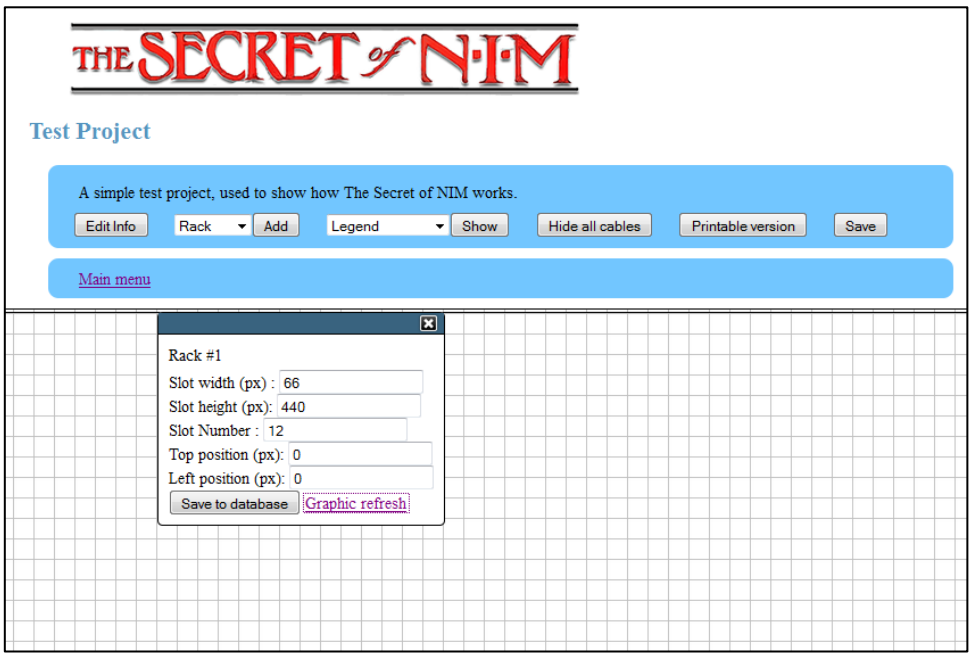
For adding a new rack, follow this method: First select “Rack” on the menu on the left of the “Add” button, then click on the “Add” button.



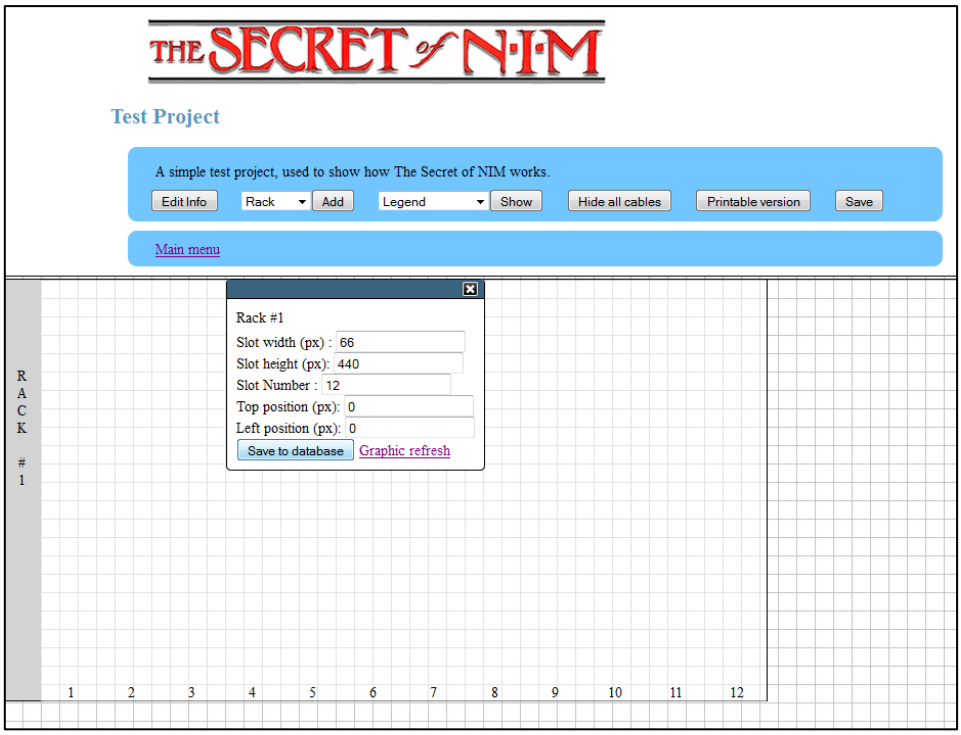
It will show you a dialog box with the parameters of the new rack. Those parameters are self-explanatory, but here a list:

- Slot width and slot height (both in pixels): The size of each slot of the rack, fixed by default at 66x440px. That the reason why the size of the image of the modules must be that size. You can change those values if you have module that have non-standard size (like out-of-rack modules).
- Slot Number: The number of slots a rack contains fixed at 12 by default. Can be changed for non-standard module (like out-of-rack modules).
- Top Position and Left Position (both in pixels): The vertical and the horizontal distance between the top-left position of the rack, and the top-left position of the grid. This is the most useful option, it avoid the overlap between all the racks.

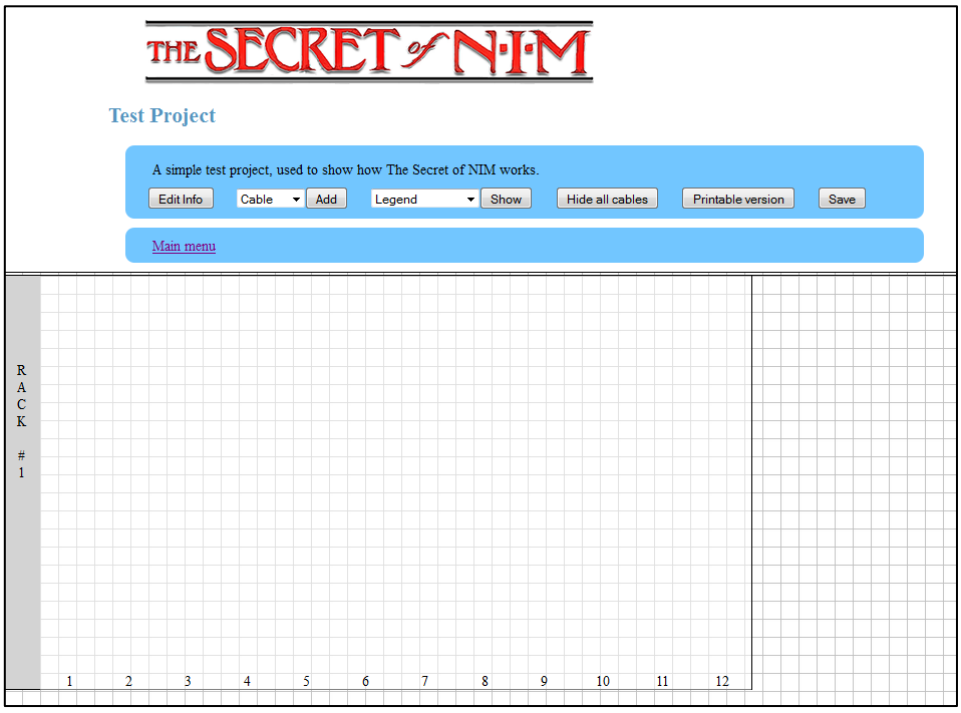
If you want to see how the rack will look, before saving it in the database, you can click on the “Graphic refresh” link.



This will show you the rack. If you close the dialog box, the rack will disappear. If you click on the “Save to database” button, the rack will be save and then you will be allowed to put modules on it.

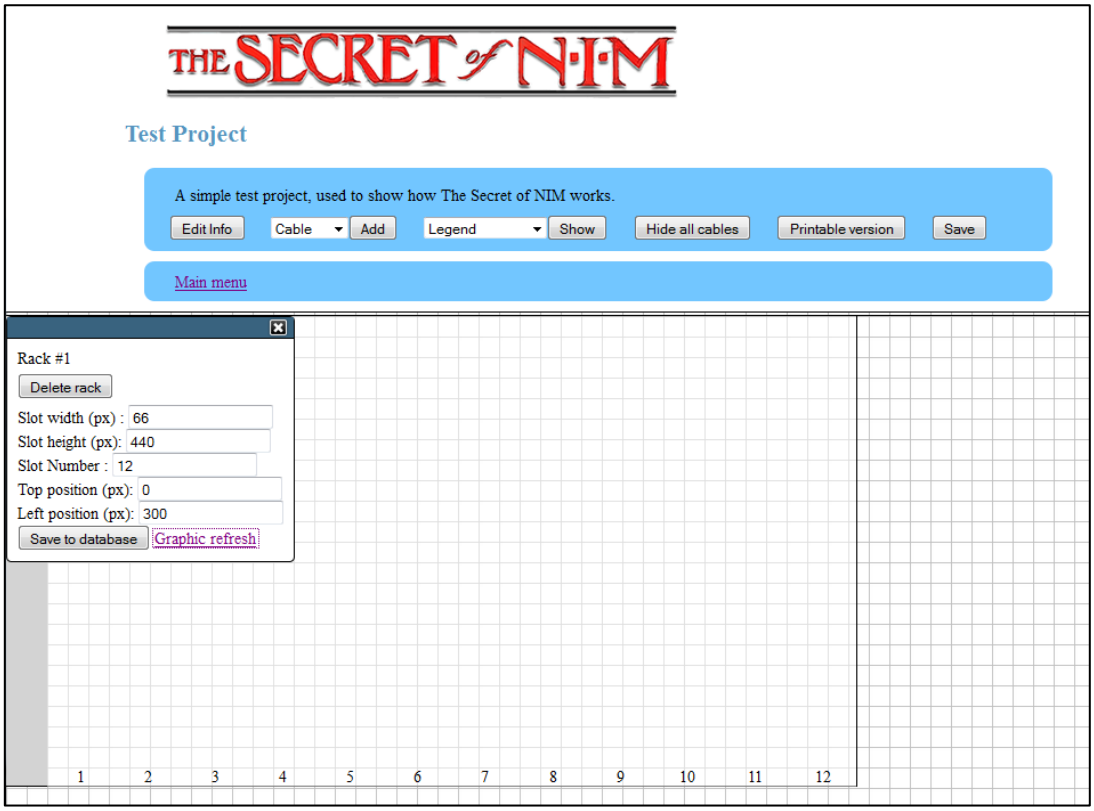


Here is the saved rack.

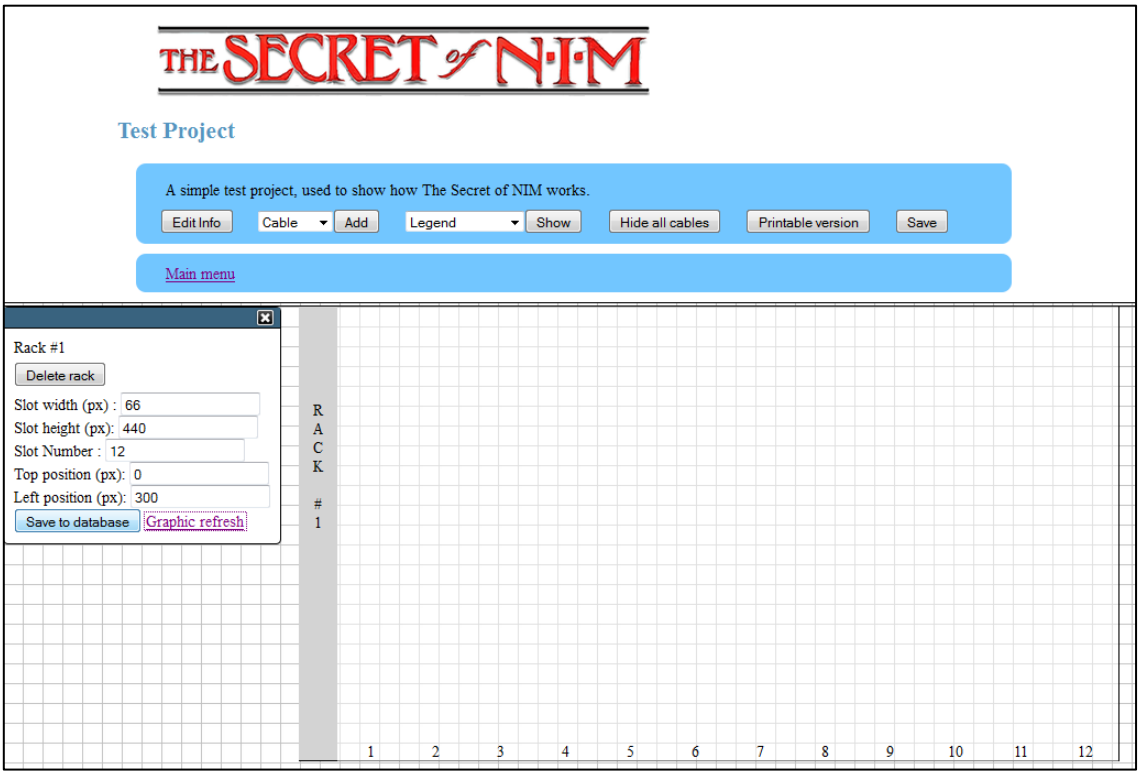


6.3 Editing rack position and size

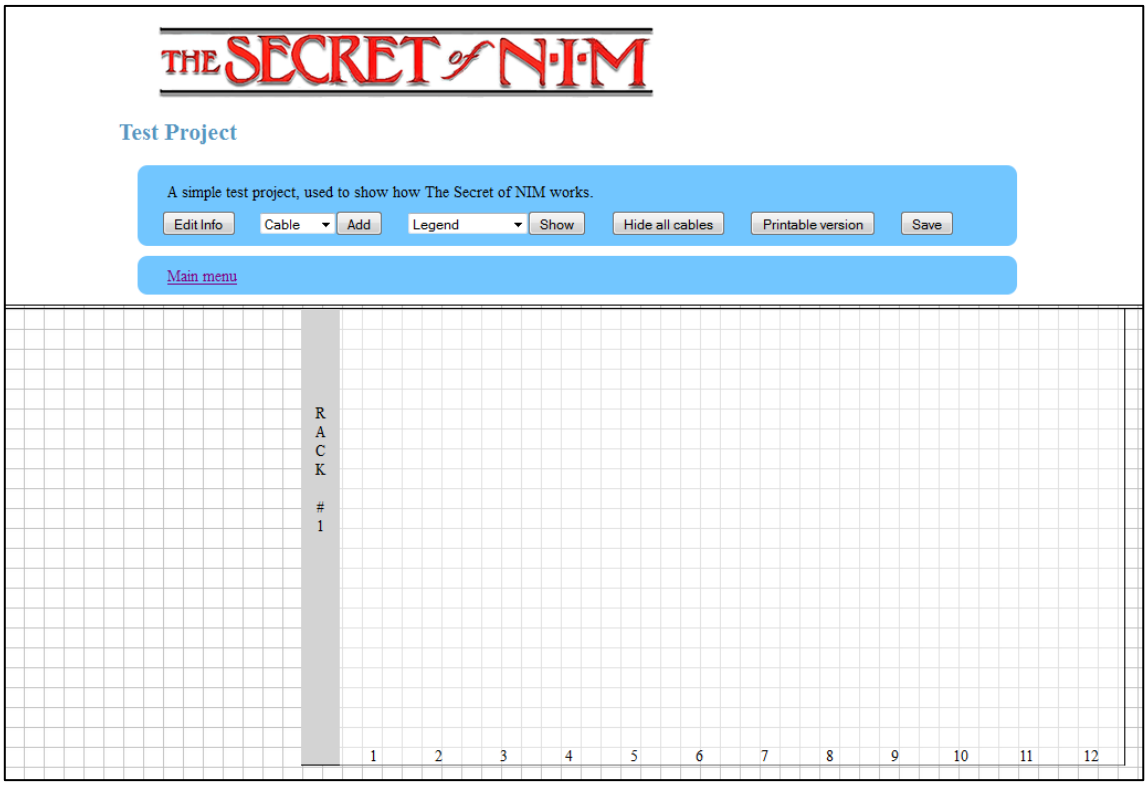
If you want to edit a rack position or his size, you can click on the grey rectangle on the left of the rack (with Rack # noted vertically on it). This will show you nearly the same dialog box shown on the section above. The method used to edit the rack is the same a before. Her we will move the rack 300px on the right. And then click on “Graphic Refresh”.



The rack has moved on the right, but hasn’t been saved yet. Let’s now click on “Save to database” to save the new position (if you close the dialog box, the rack will come back to its previous position).

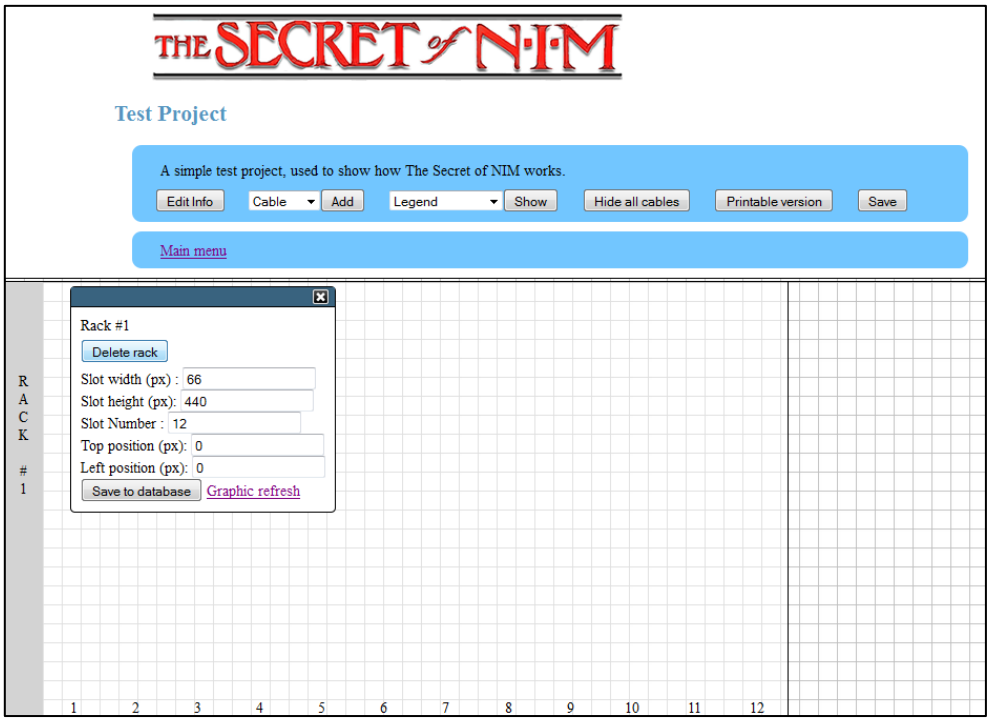


The rack has now moved.



6.4 Deleting a rack

The method for deleting a rack is the following: Click on the grey rectangle on the left of the rack you want to delete (with Rack # noted vertically on it). A dialog box appears. Click on the “Delete” button.

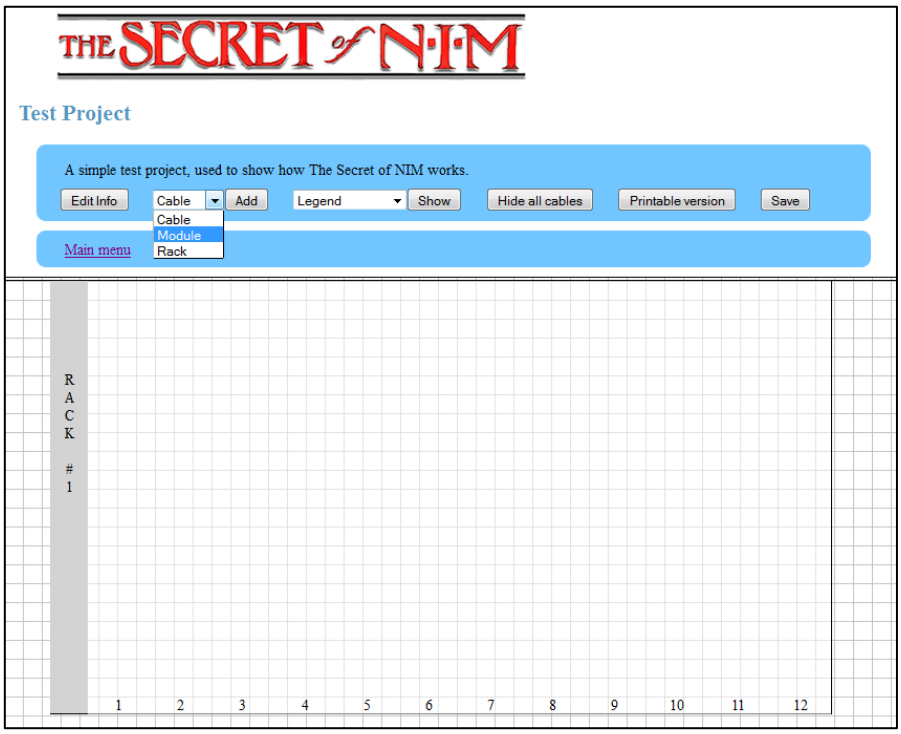


The rack is now deleted.

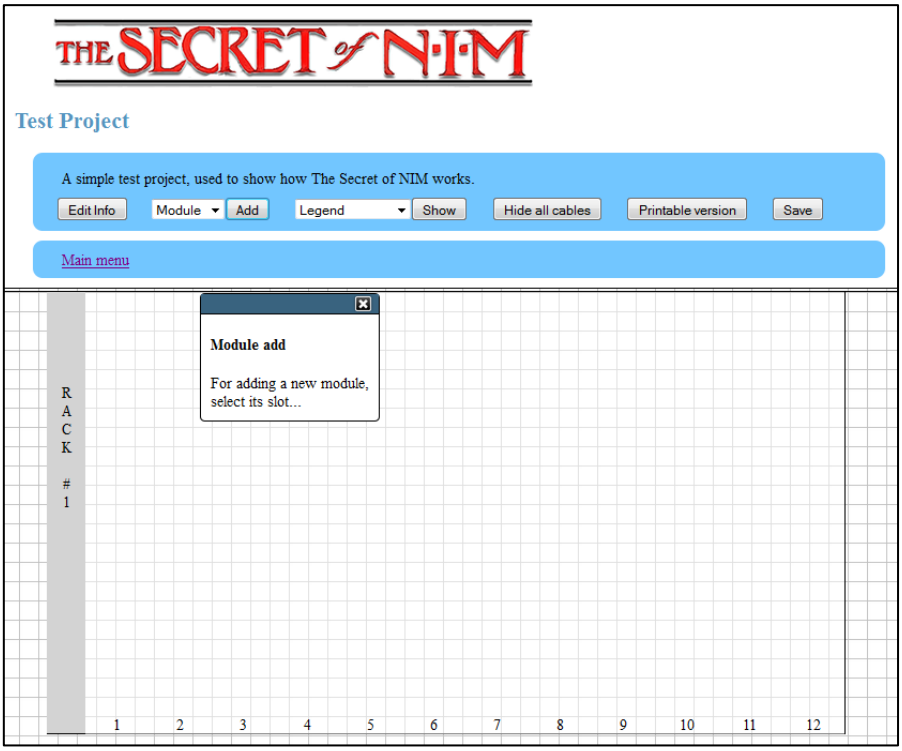
6.5 Adding a new module

In this section we will see how to combine the projects and the modules, simply by adding module. Note that module can be placed only on a rack.

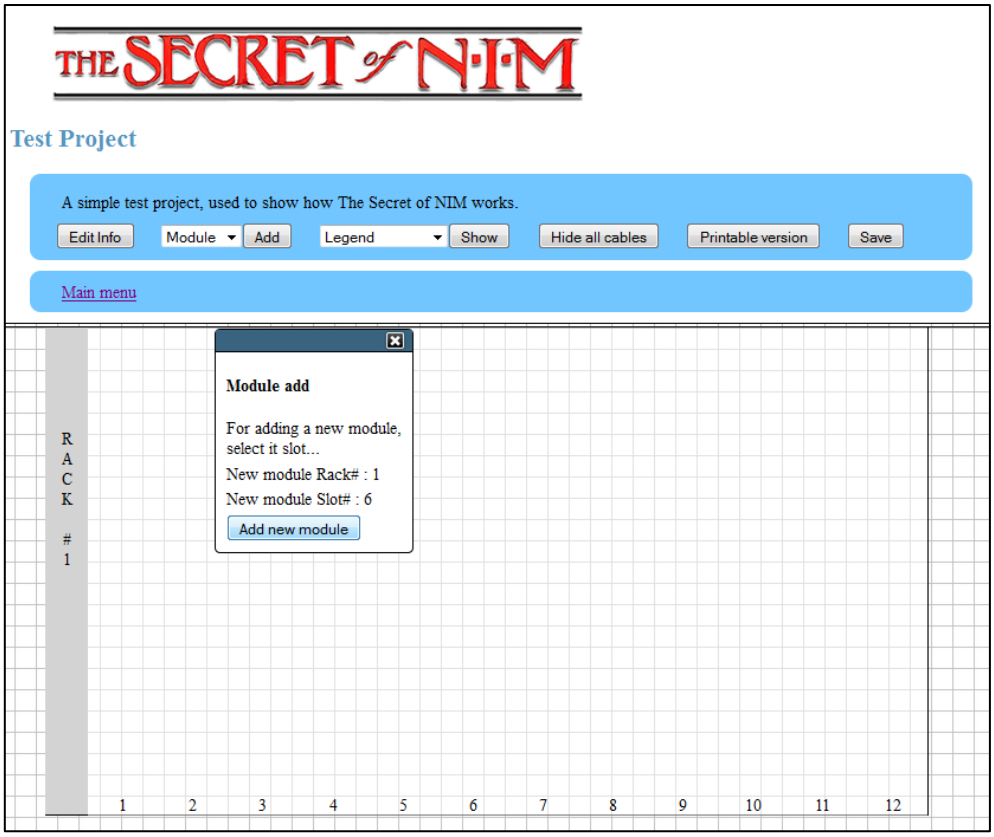
The method is the following: Select Module in the menu on the left of the “Add” button, the click on the button.



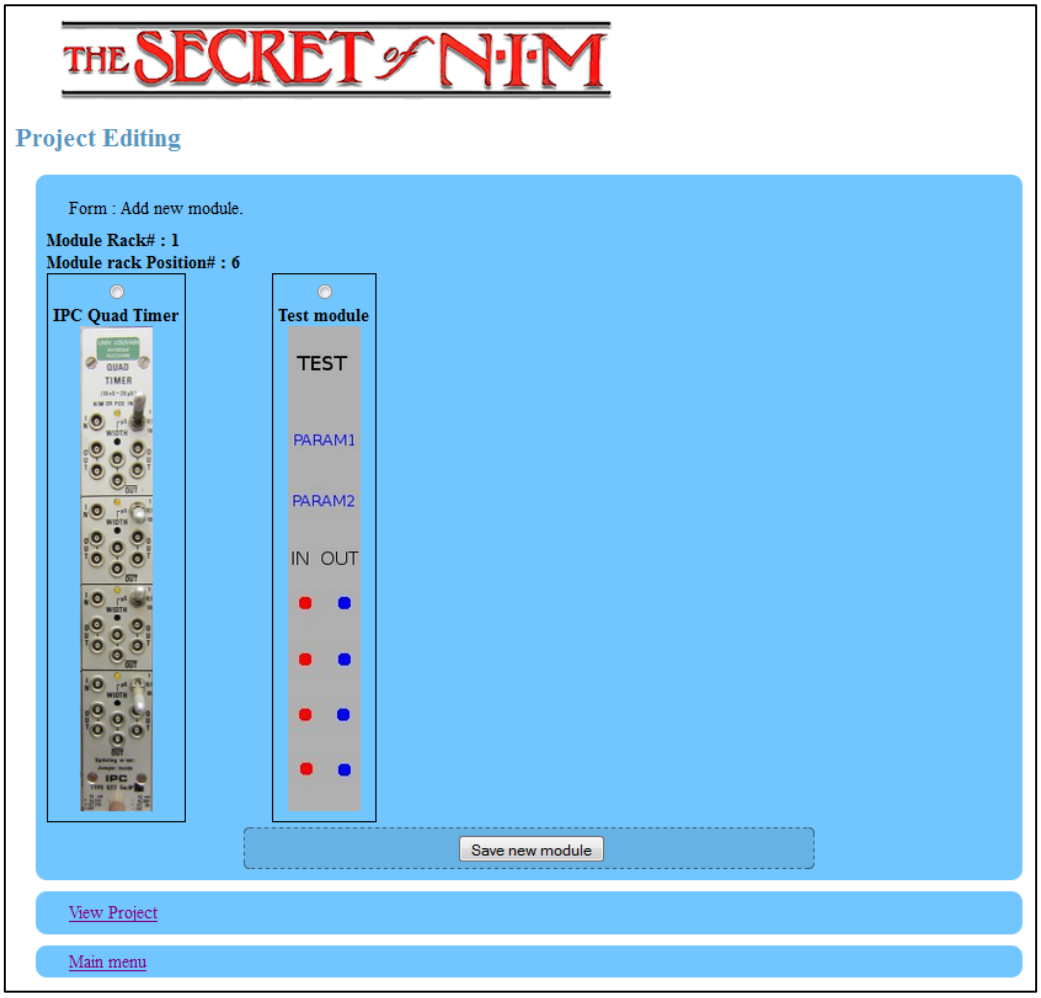
A small dialog box will appear. You have now to choose where the module will be placed. Select a slot on a rack by clicking on it.



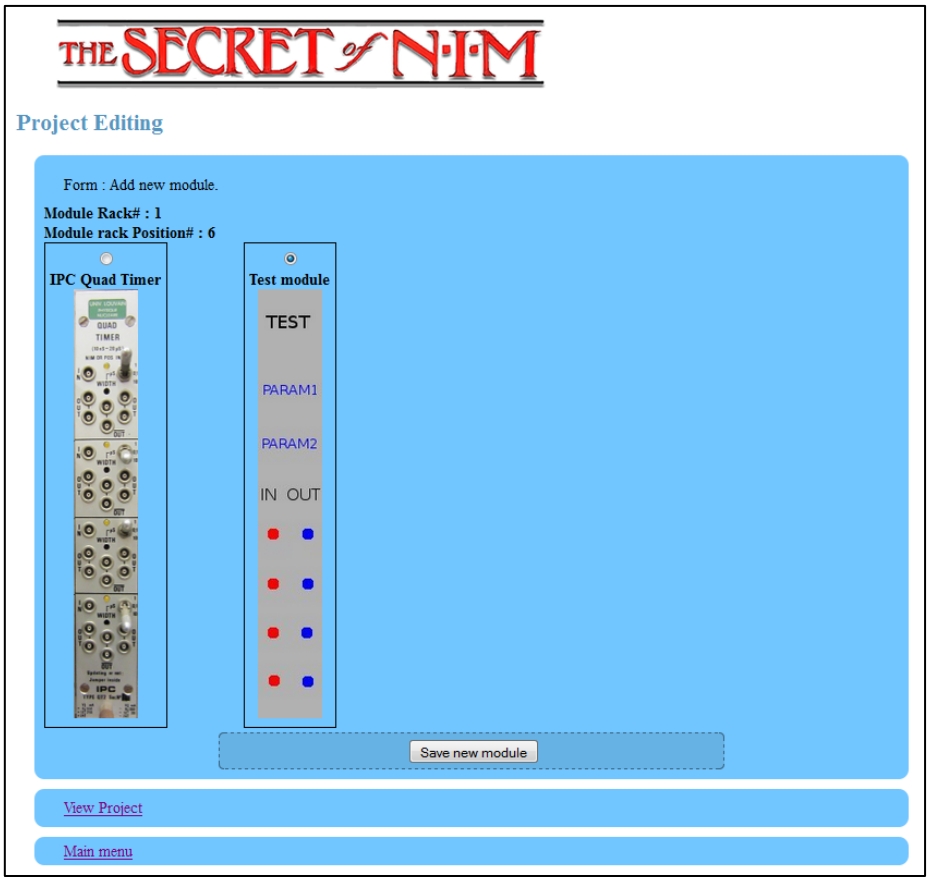
Once you have clicked on the slot, the dialog box will show the rack number and the slot number where the module will be placed; a “Add new module” will also appear, click on it.



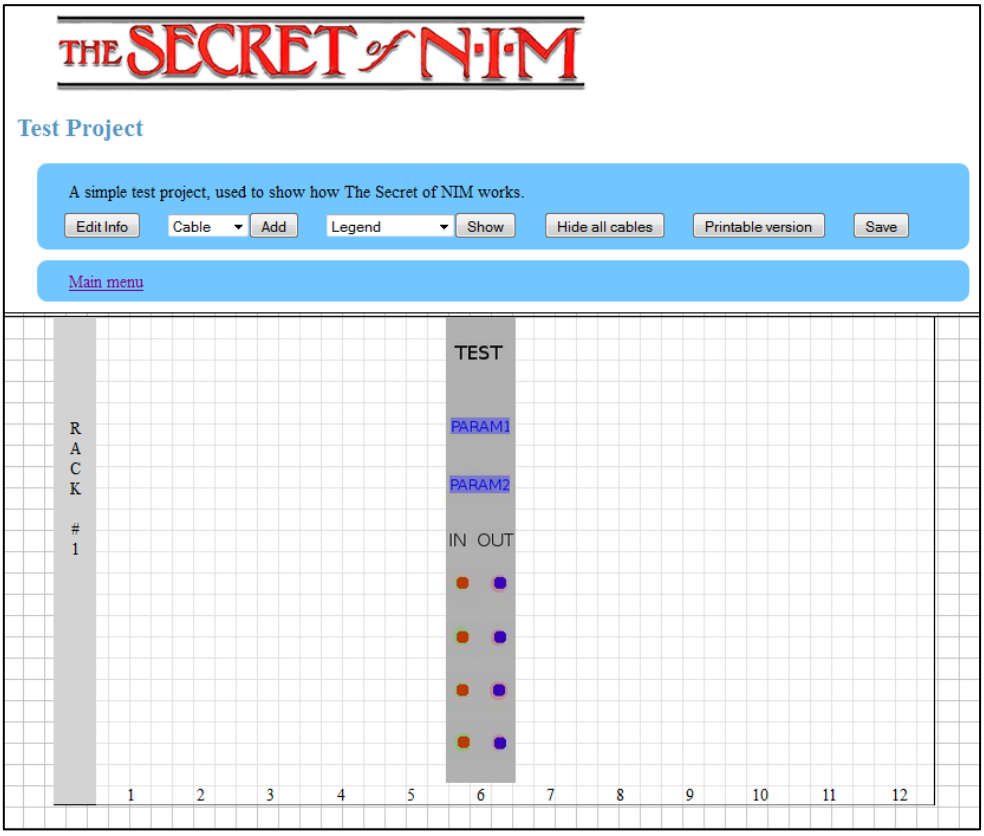
You will be redirected on a new page. On this page you can select the module you want to add.



When you have selected it, click on the “Save new module” button.



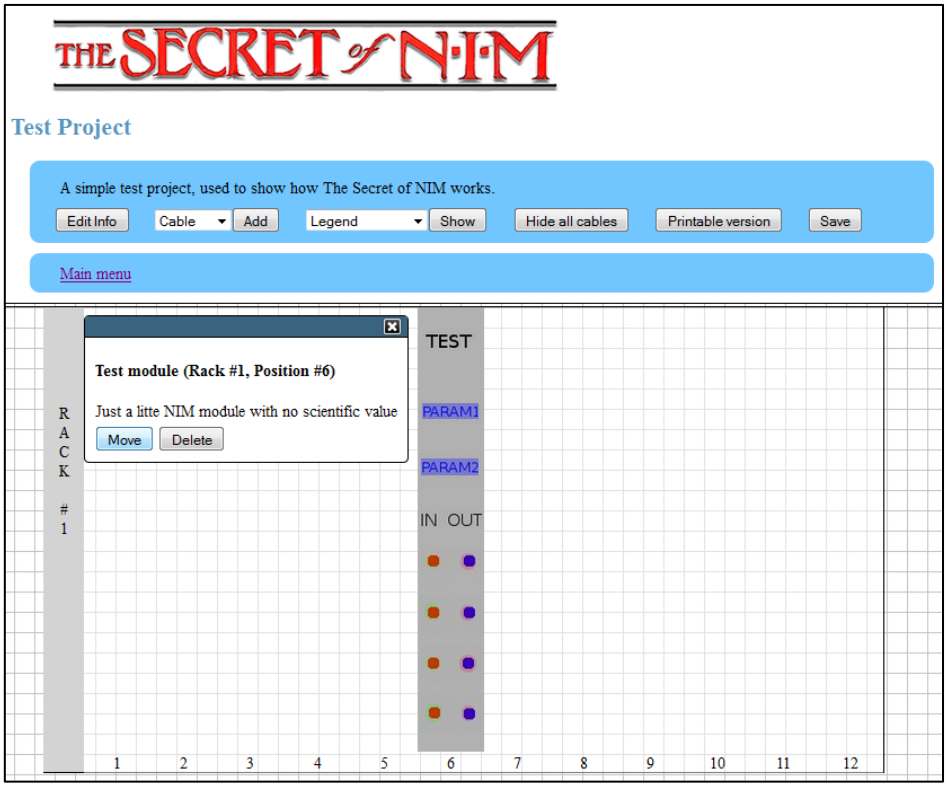
The module you have selected is now on the chosen slot.



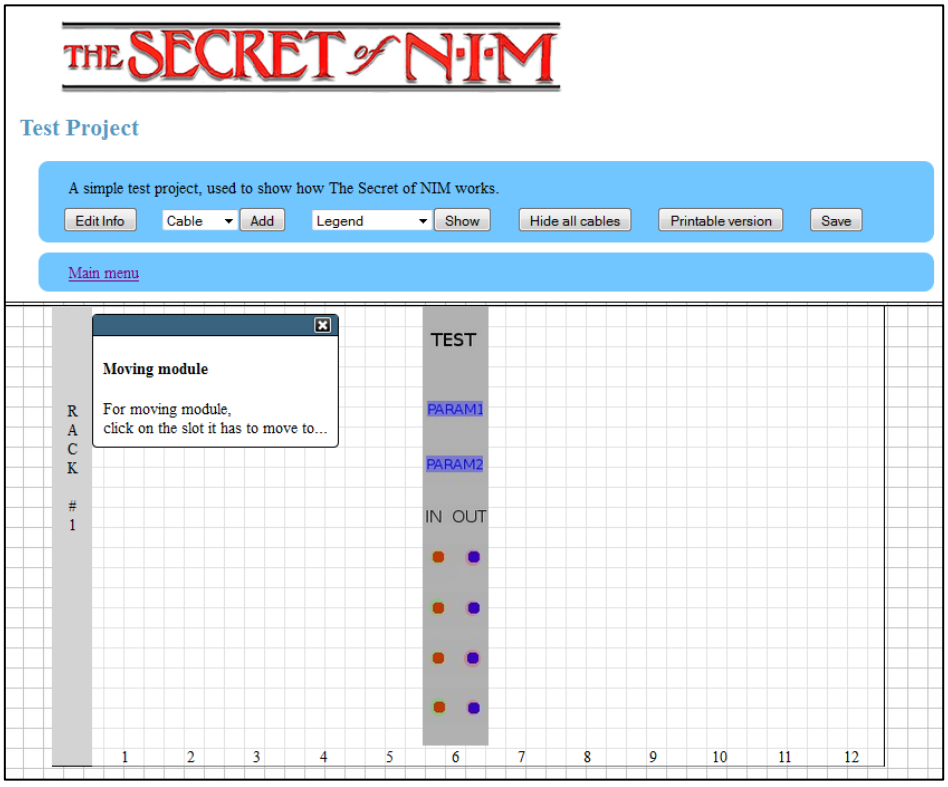
6.6 Moving a module

If it's the chaos in you project, you will probably try to clean it and/or reorganize it to make it clearer. A way to do it is to move some module. This operation will keep the parameters and the cables plug on it.

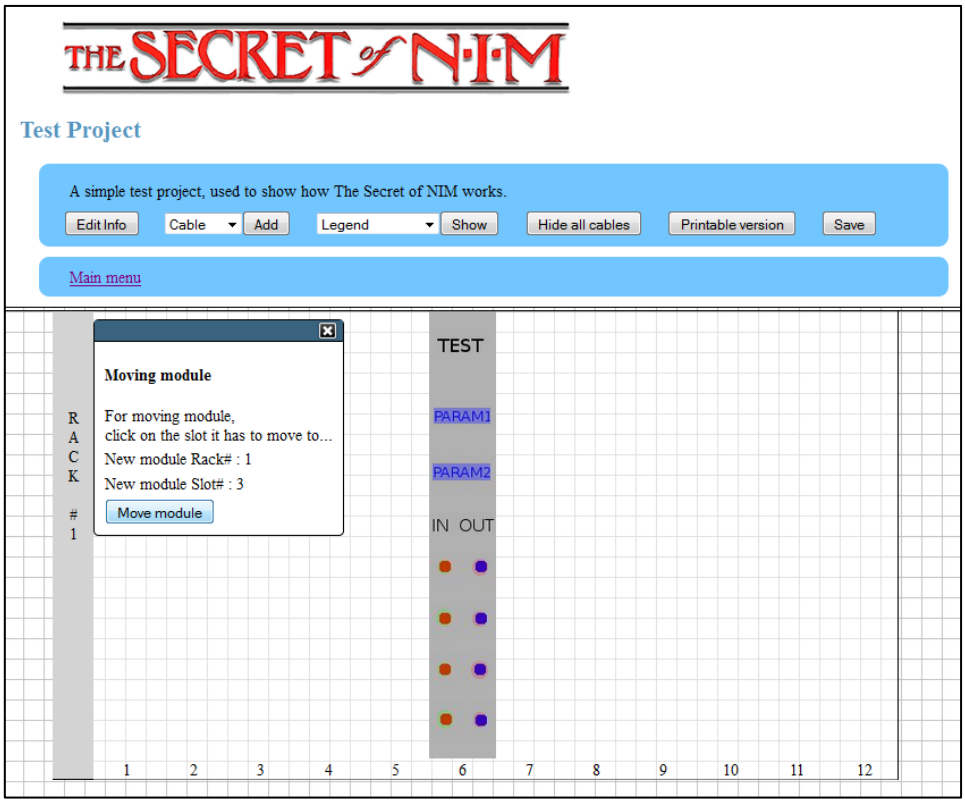
The method used to move a module is the following: First click on the module you want to move. A dialog box will appear with the name of the module and its position. Then click on the "Move" button of the dialog box.



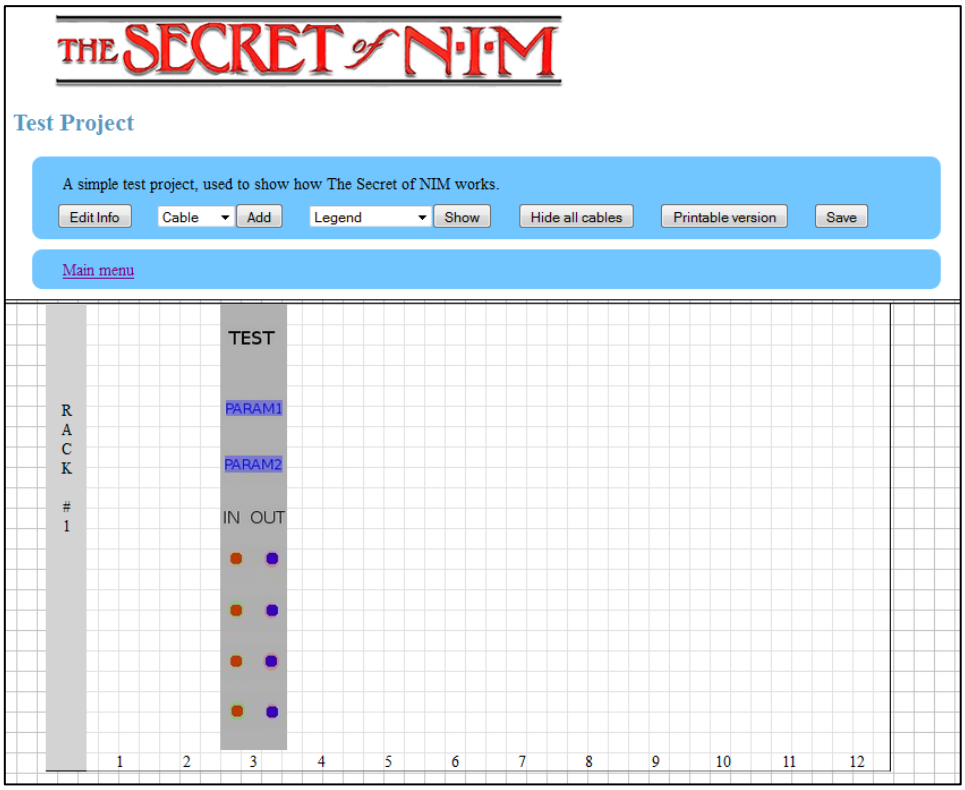
The dialog box will change and suggest you to select the new position of the module, and then you have to click on the new slot where the module will be placed.



Once you have selected it, the new position is shown and a “Move module” button appears. Click on the button.



The module has now moved.

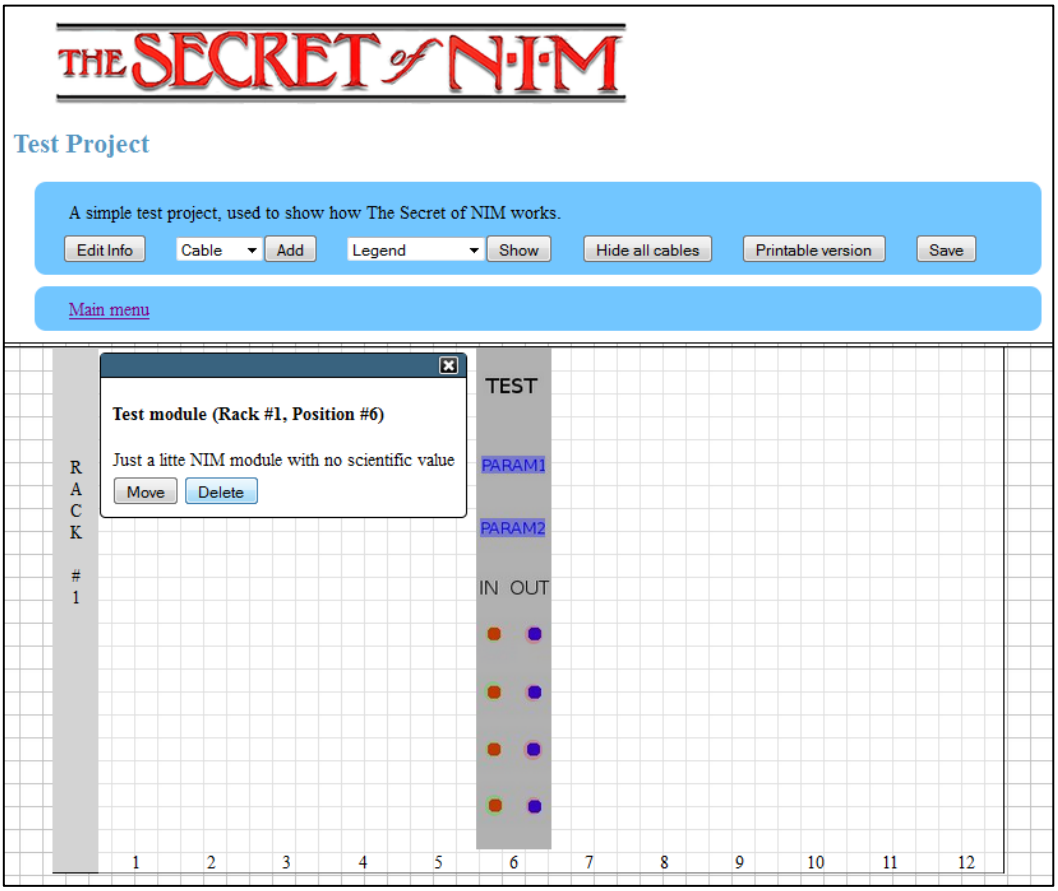


6.7 Delete a module

If you want to delete a module, follow these steps: Click the module you want to delete. A dialog box appears, click on the “Delete” button. The module is now deleted.

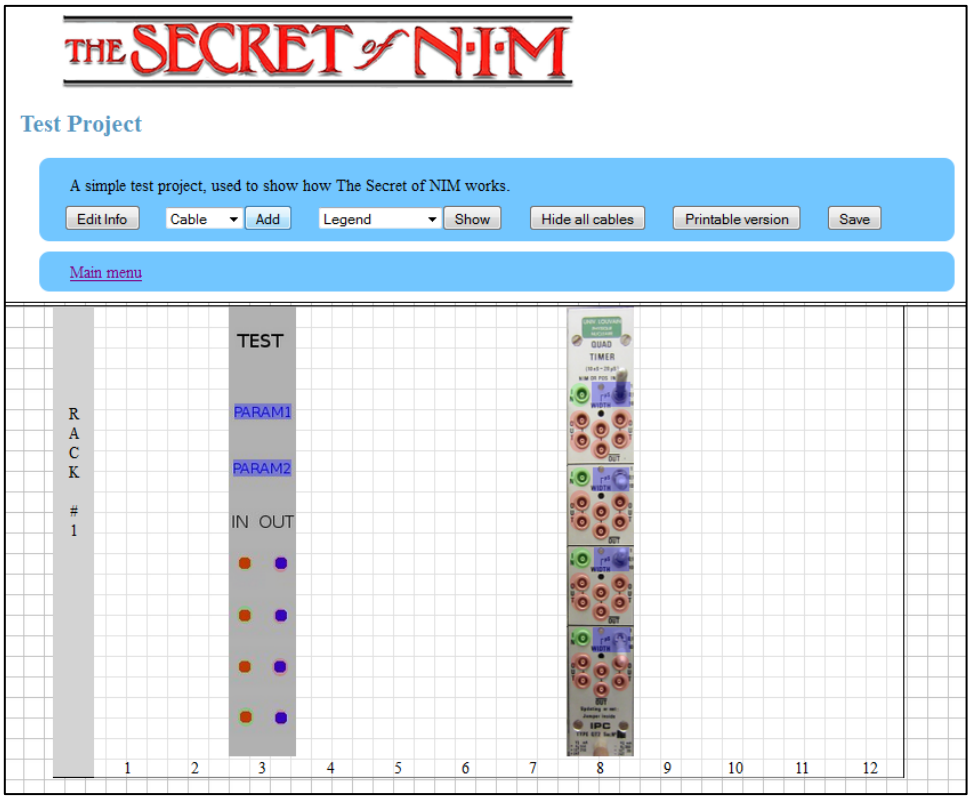
Note that deleting a module removes all the cables and all the parameters attached to the module.

Be careful, the program will not ask you to confirm your choice of deleting the plug. This might be change later.

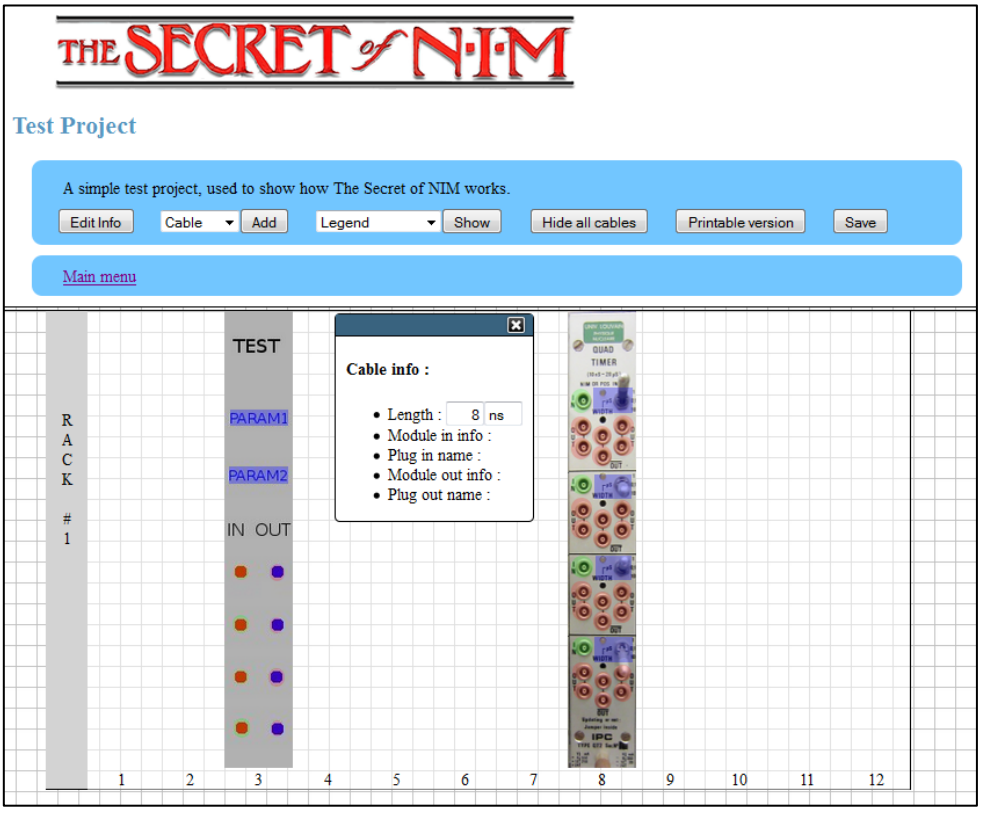


6.8 Adding a wire

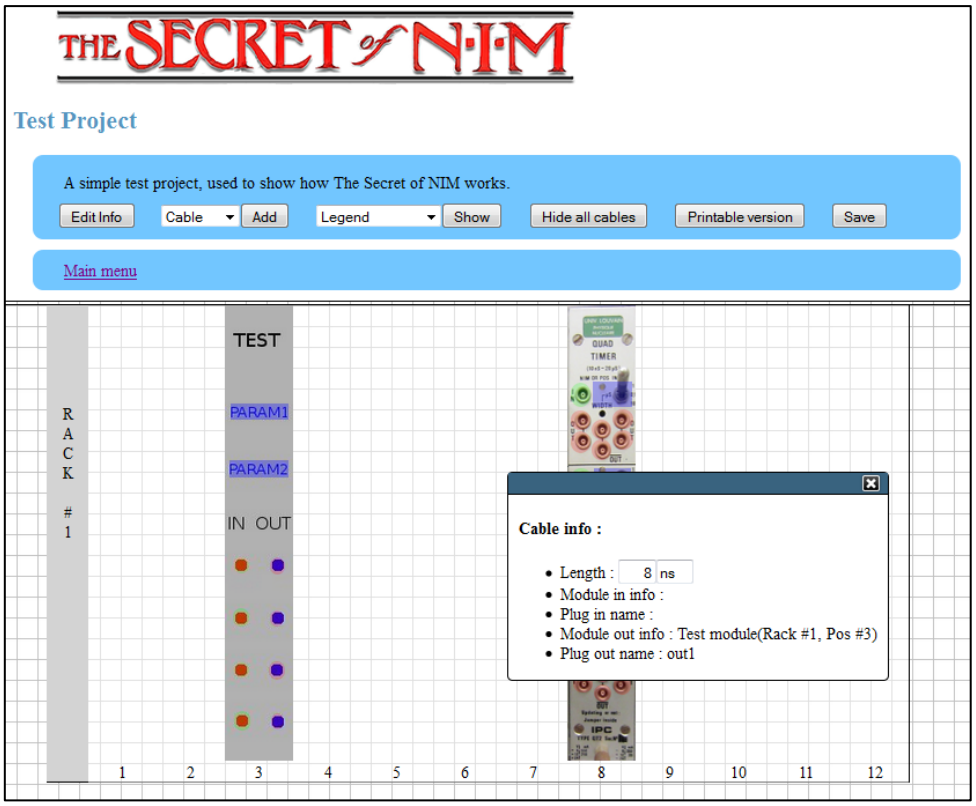
The wires in The Secret of NIM made the nodes of the program. They connect all the modules together. The method used to add a wire is the following: First select “Cable” in the menu on the left of the “Add” button. Then click on it.



A dialog box appears, set the length of the cable and then click on the input or the output where the cable will be plugged. For selecting a plug, simply click on it. The inputs are green and the outputs are red. Each cable MUST have an input and an output if you want to save it.

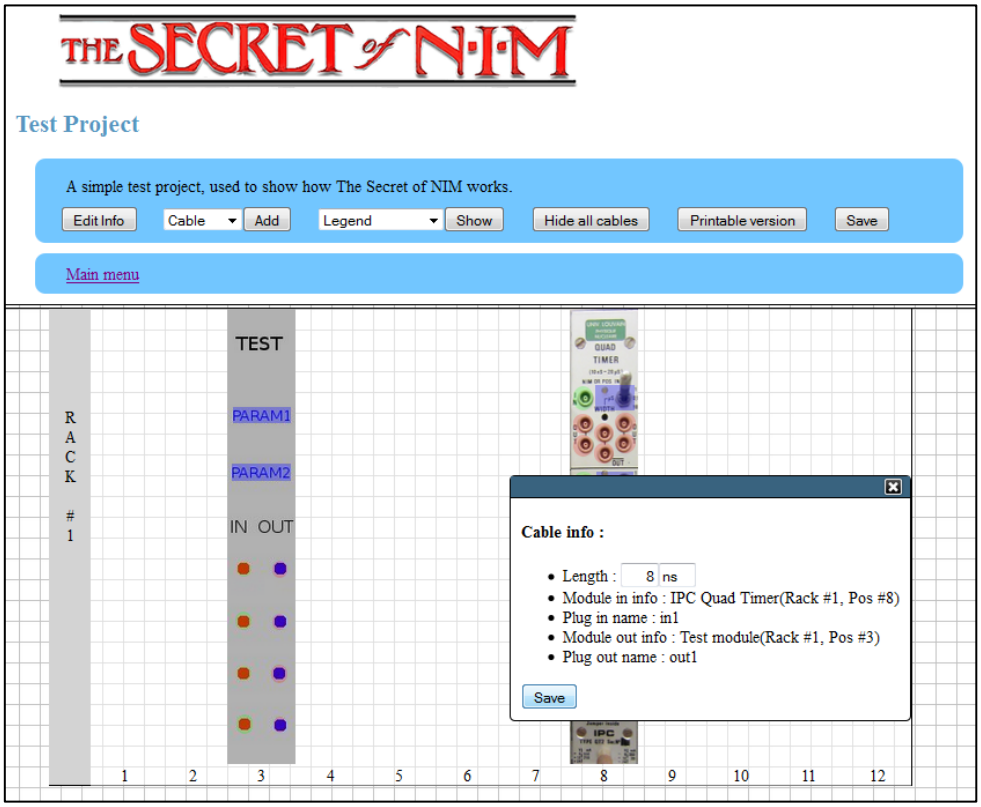


When you click on an input or an output, the dialog box is updated and show which plug has been selected. Here the first output of the module on the left.

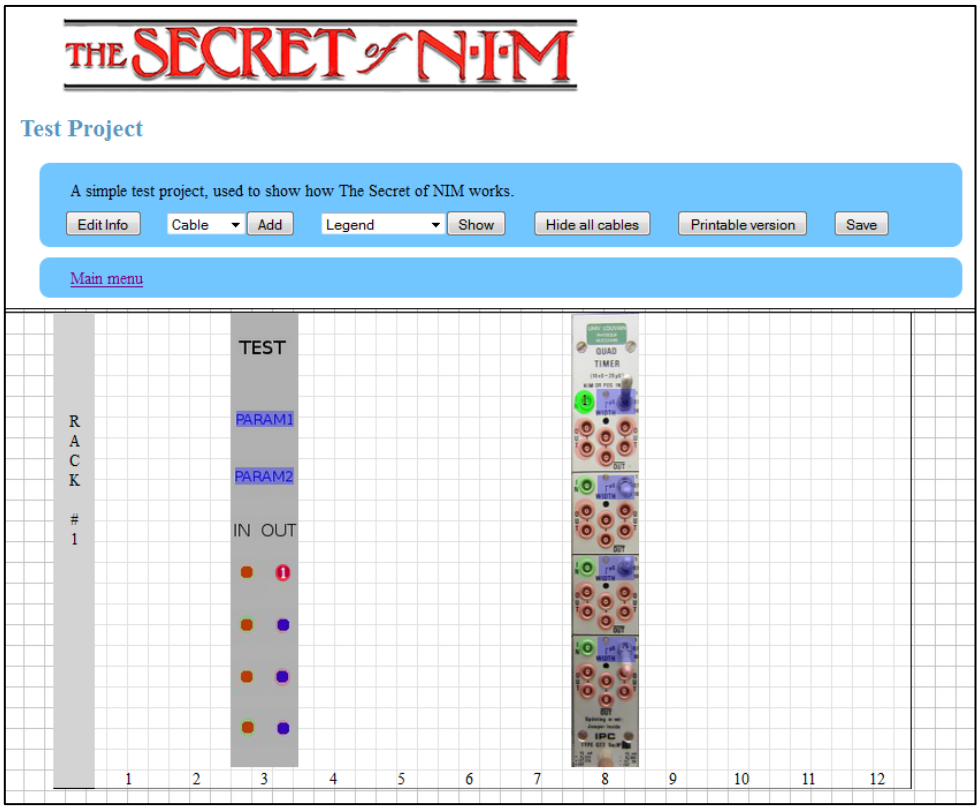


It's the same for the input. Note that if you select two outputs, the first one will be replaced by the second and no input will be selected.

Once input and output are both selected, a "Save" button appears, click it.

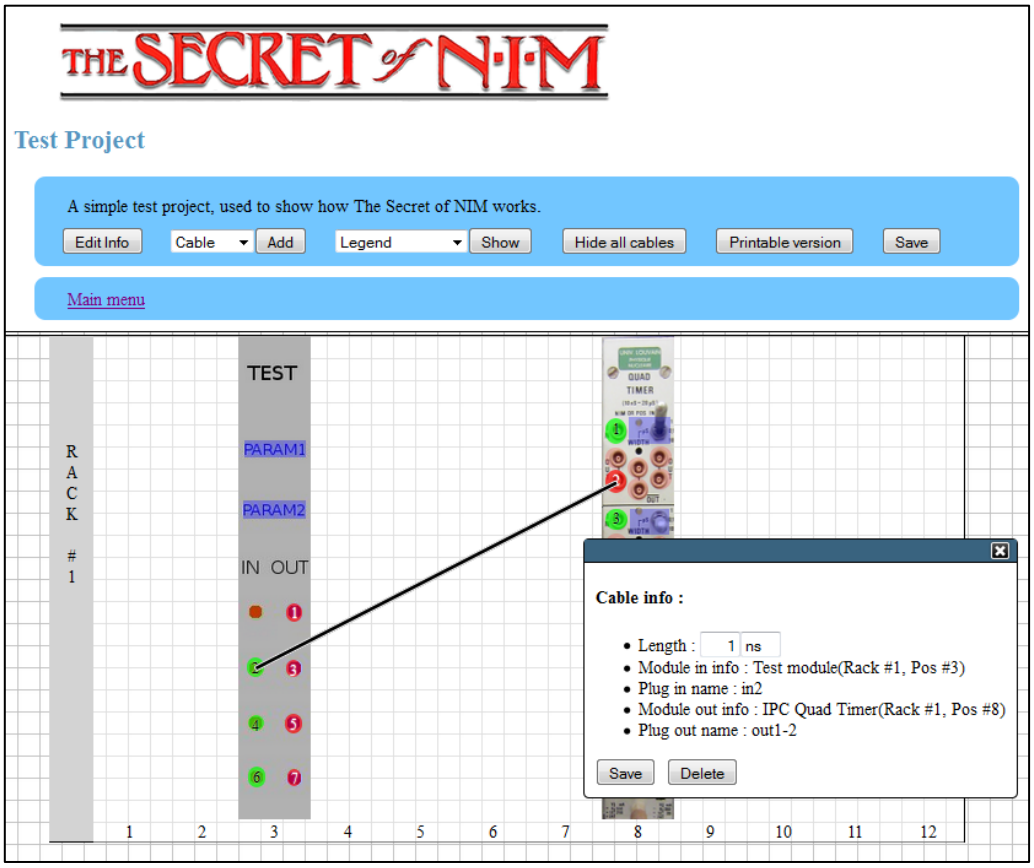


The cable is created.



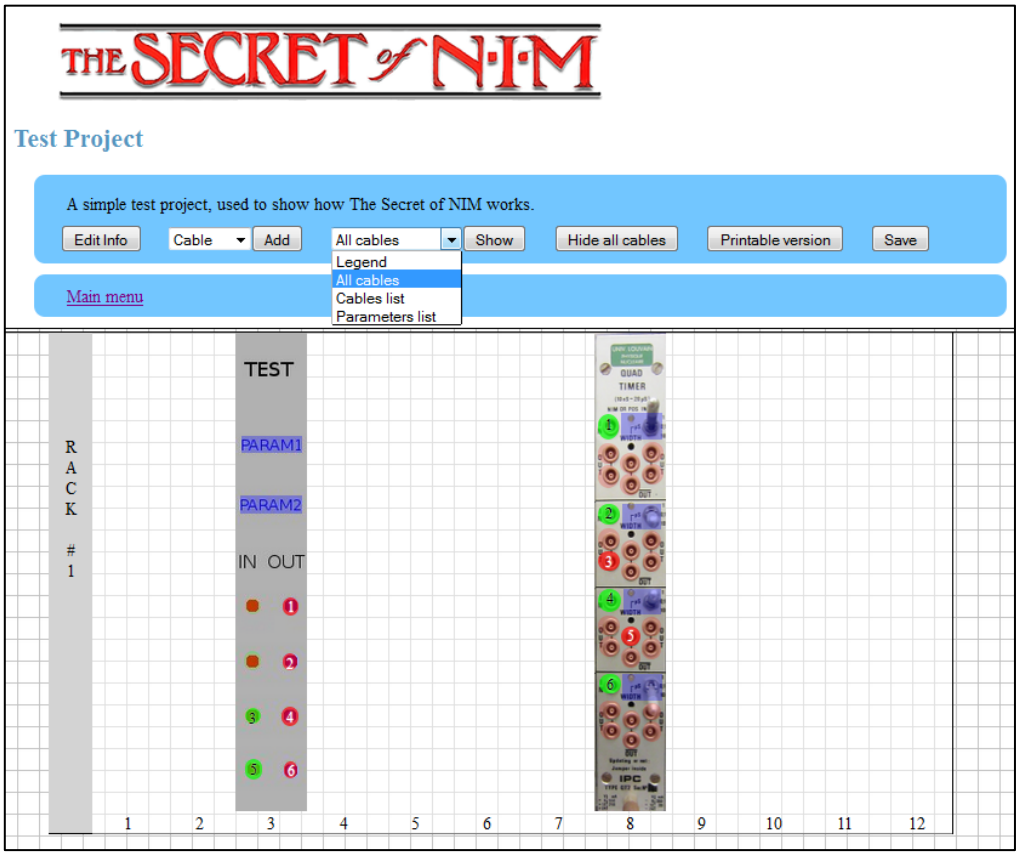
6.9 View a wire

Click on a plug with a number, the cable associated to that plug and its parameters will be shown.

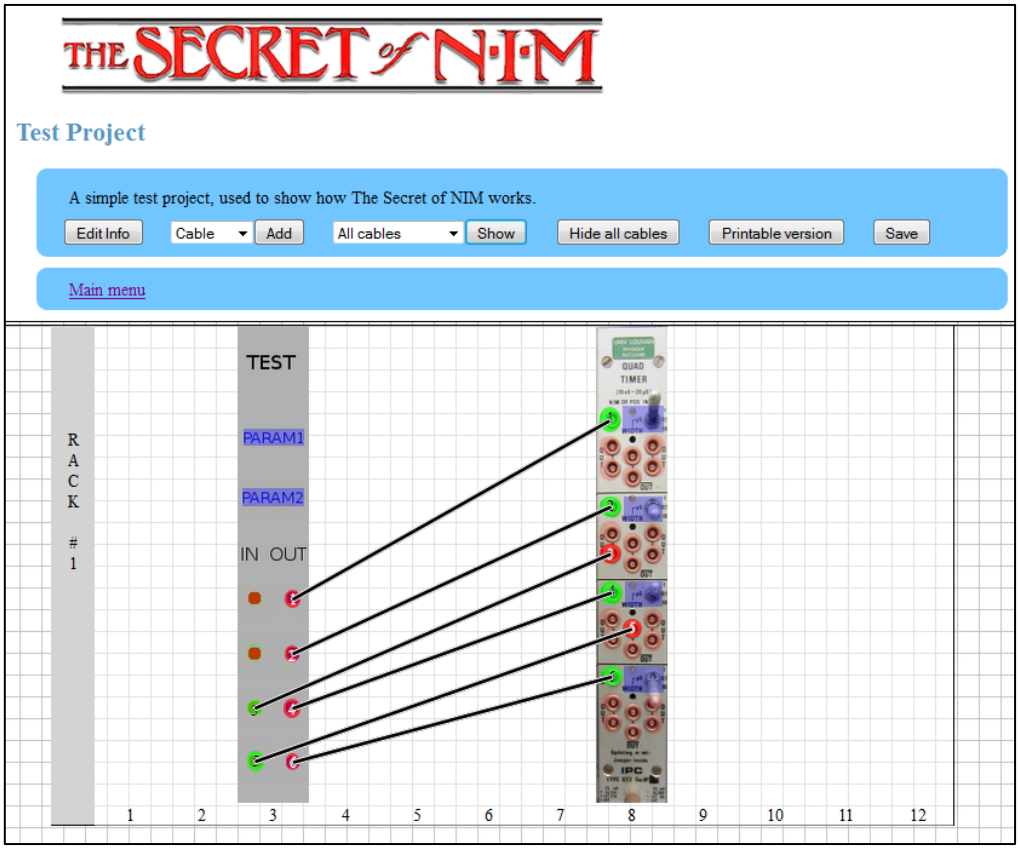


6.10 View all wires

Select “All cables” in the menu on the left of the “Show” button then click on the button.

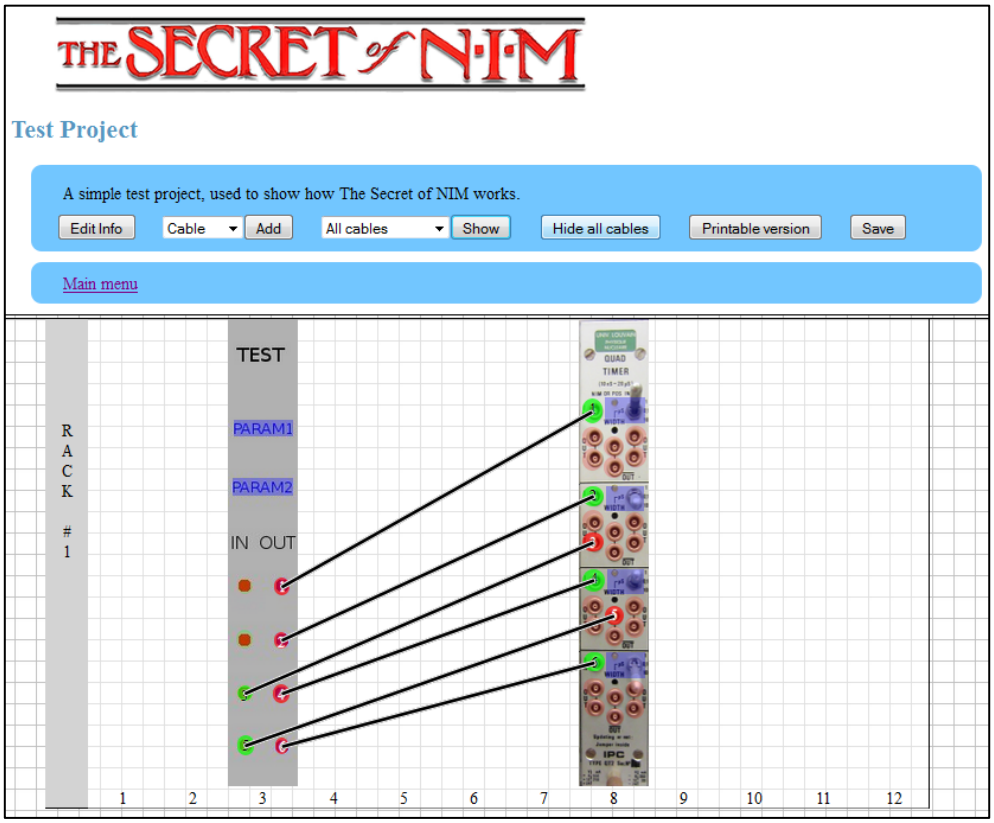


All the cables are now visible.

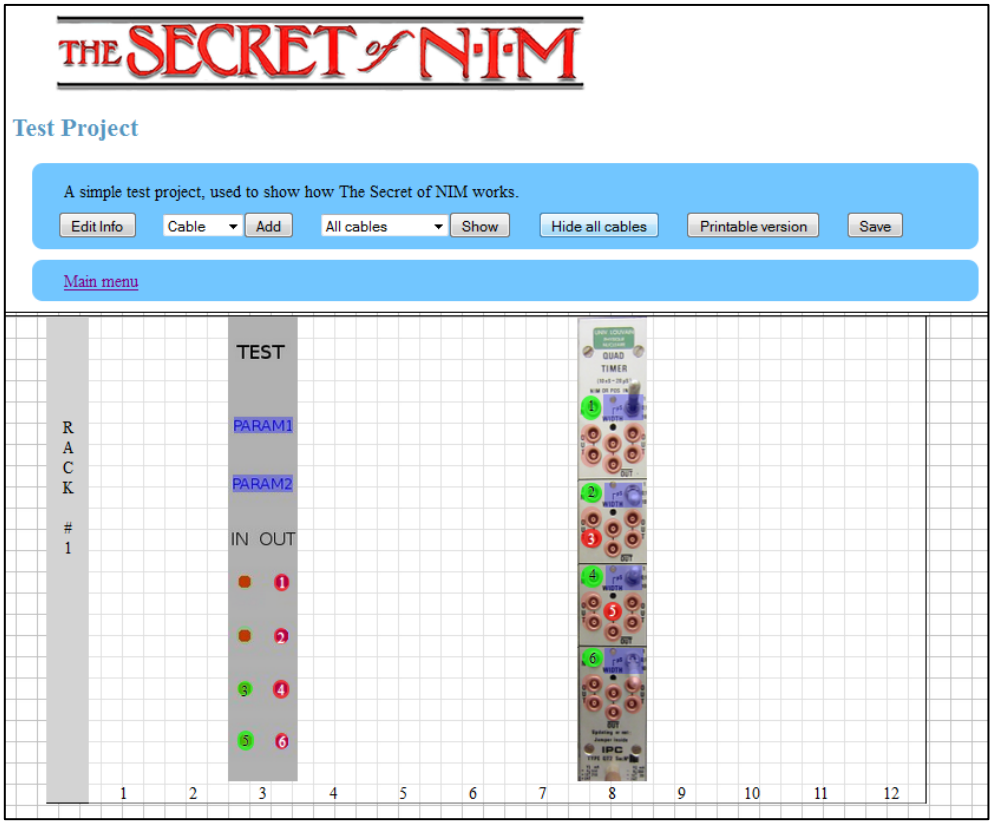


6.11 Hide all cables

When some cables are shown and you want to hide them all, simply click on the “Hide all cables” button.



The cables are now hidden.

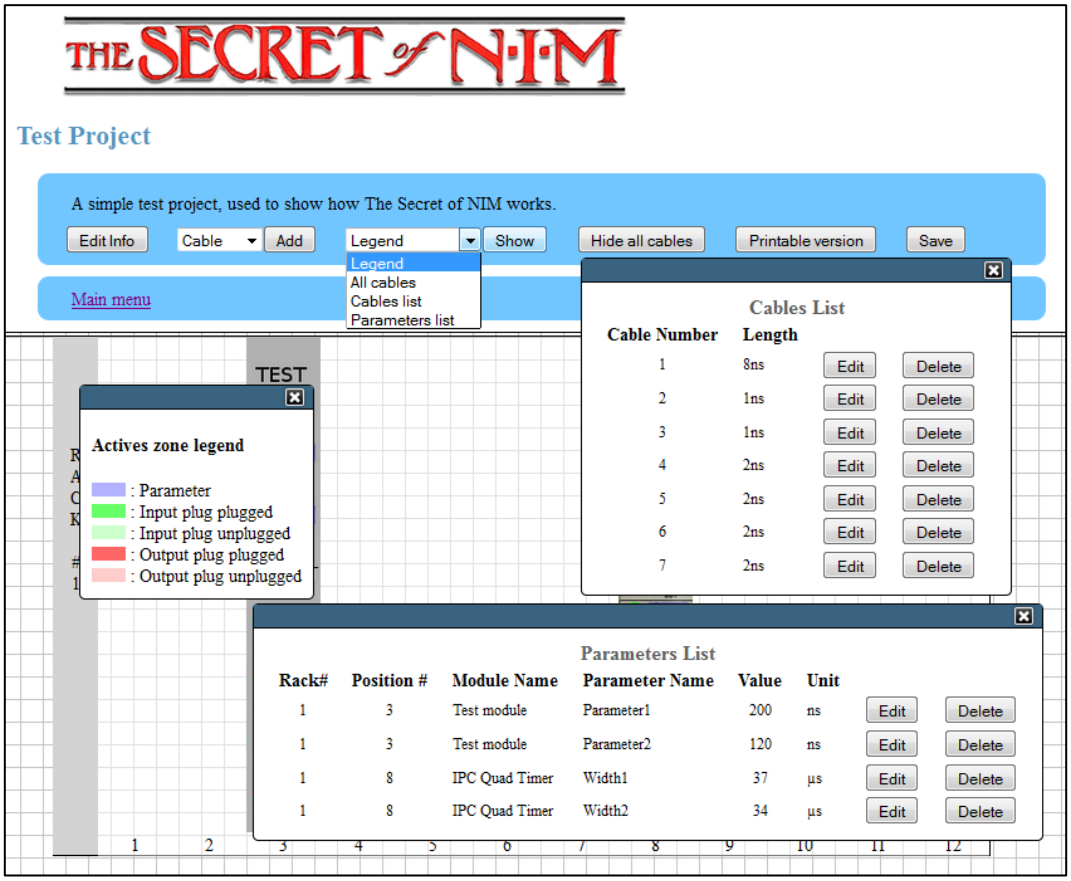


6.12 Show project wires list, module parameters and legend

If you want to see the wire list, without showing all the cables, it's possible. You have to select "Cable list" in the menu on the left of the "Show" button and then click that button.

The same method apply if you want to see the list of the modules parameters which are set: Simply select "Parameters list" in the menu on the left of the "Show" button, then click the button. We will see how to set parameters later in this manual.

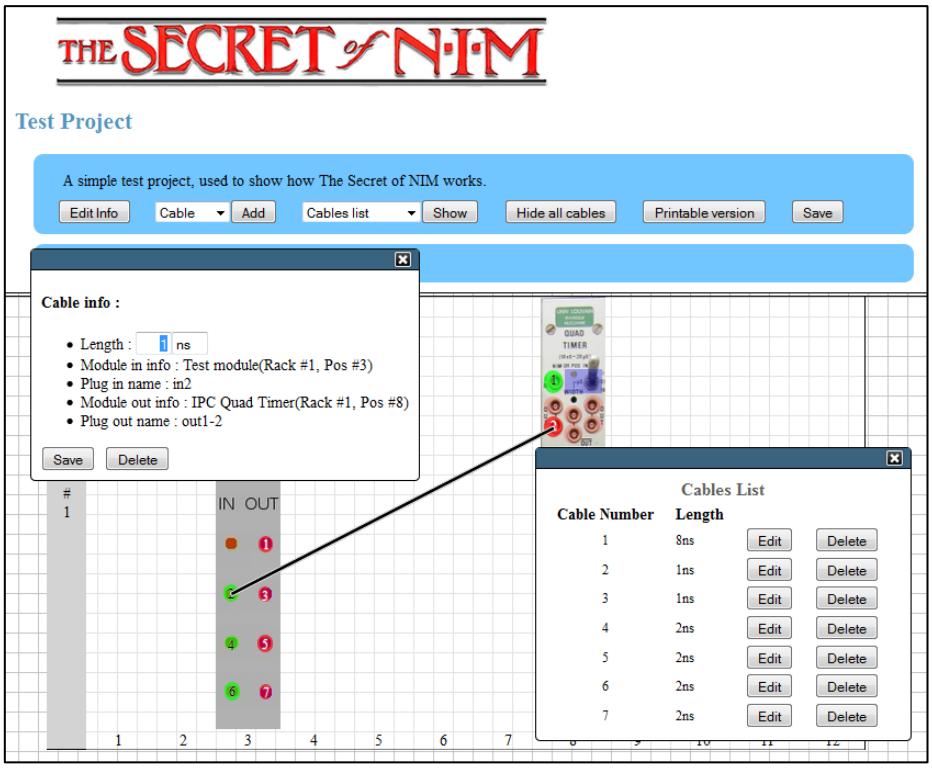
Finally, if you want to remember which color on modules correspond to which kind of active zone (plugs or parameters), just select "Legend" in the same menu, then click on the "Show" button.



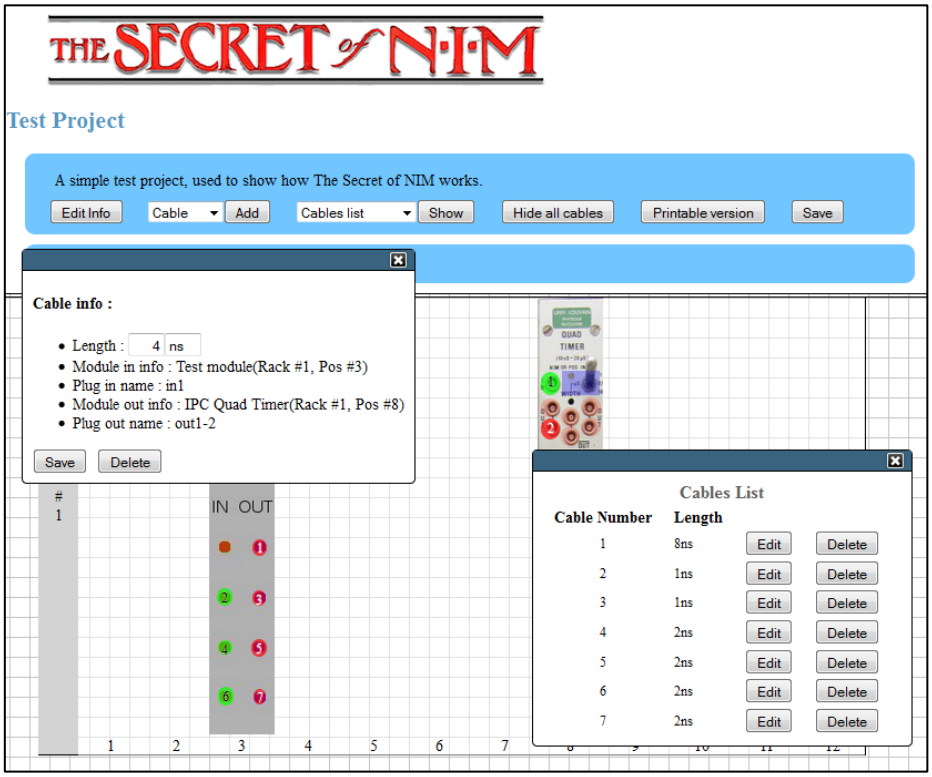
6.13 Edit wire plugs and length

If you want to change the parameters of the wire, there are two methods. The first one is simply by clicking on one of the plug of the wire, the other one is when you show the wire list (see below), you can click on the “Edit” button associated to the wire you want to edit.

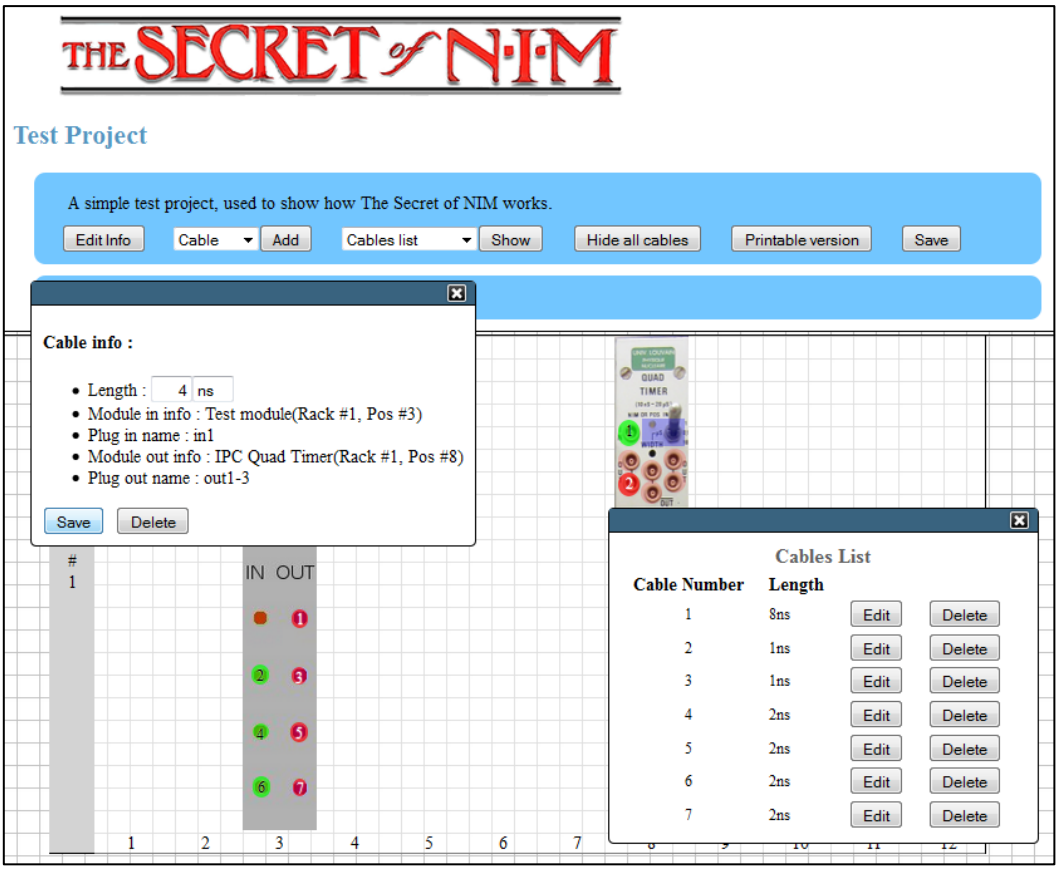
Both methods will show you a dialog box similar to the one shown when you add a wire. You can easily change the wire length (just change the value).



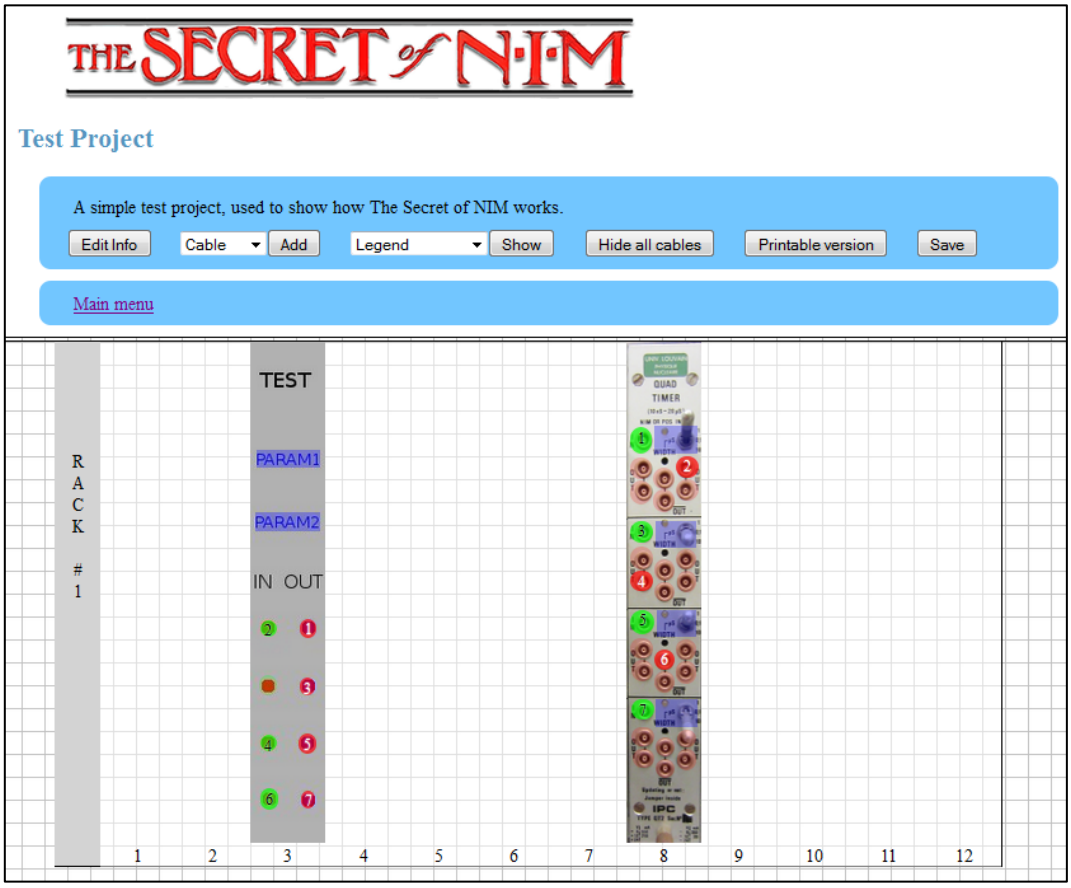
Then, if you click on another input, the dialog box is updated and shows the new input of the plug.



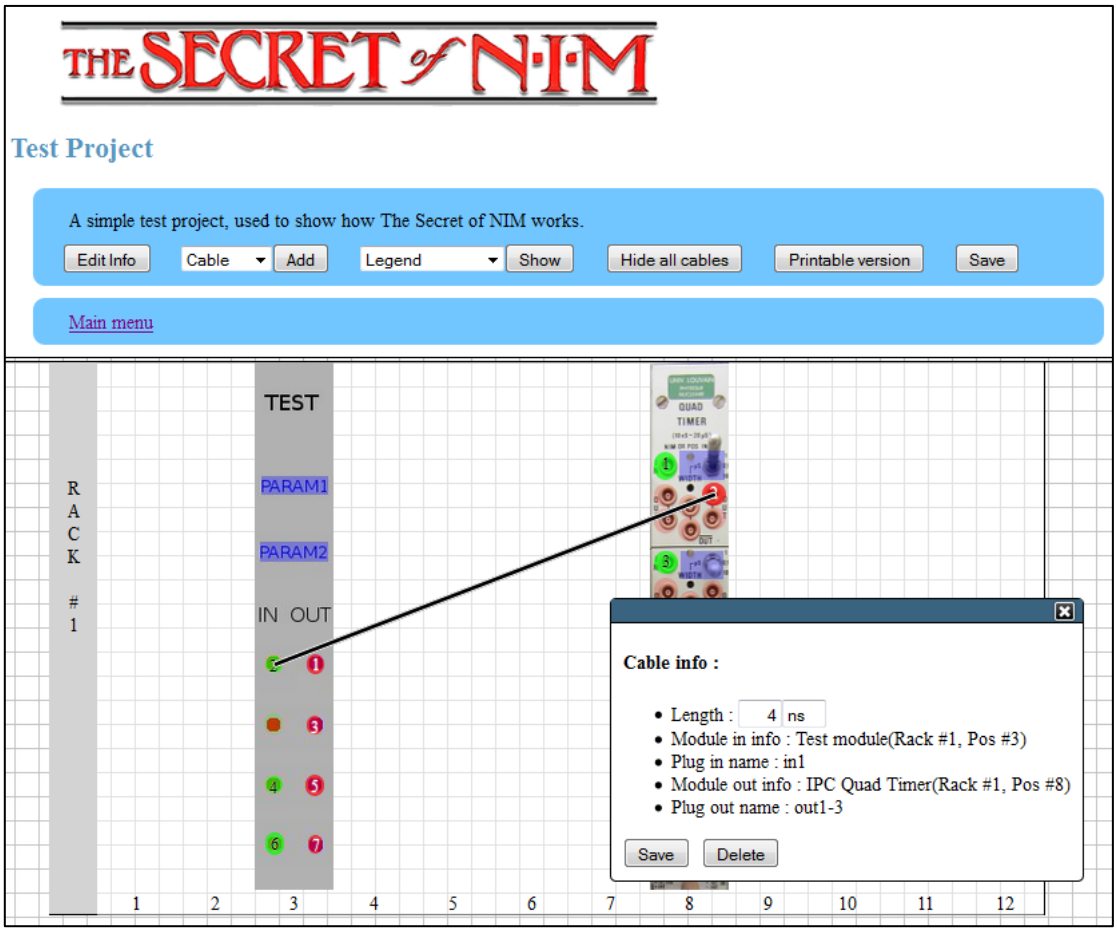
The same applied to the output. You can click on the “Save” button whenever you want, you don’t have to change all the parameters (plugs and length), the parameters shown in the dialog box will be the new ones for the cables.

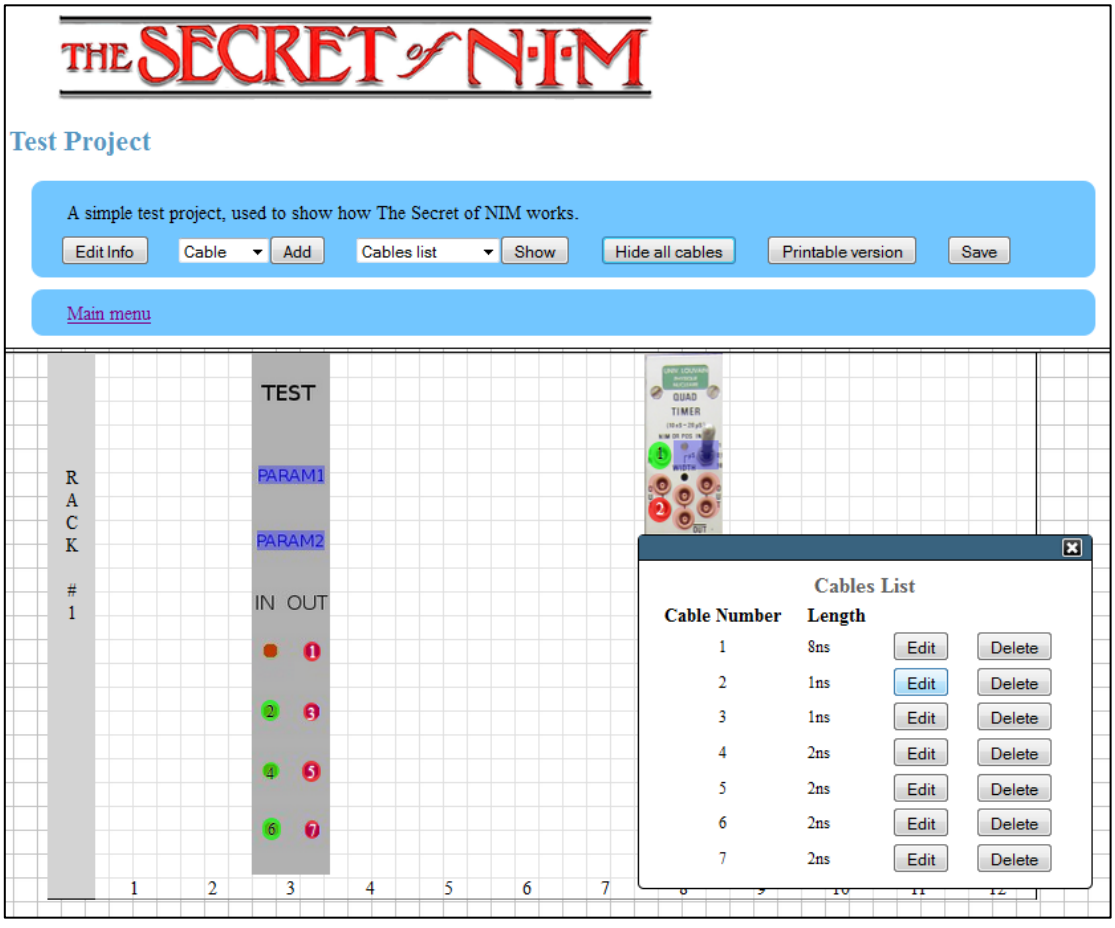


All the boxes will disappear when the new information for the wire are saved.



You can convince yourself by showing the new cable and/or the wire list.



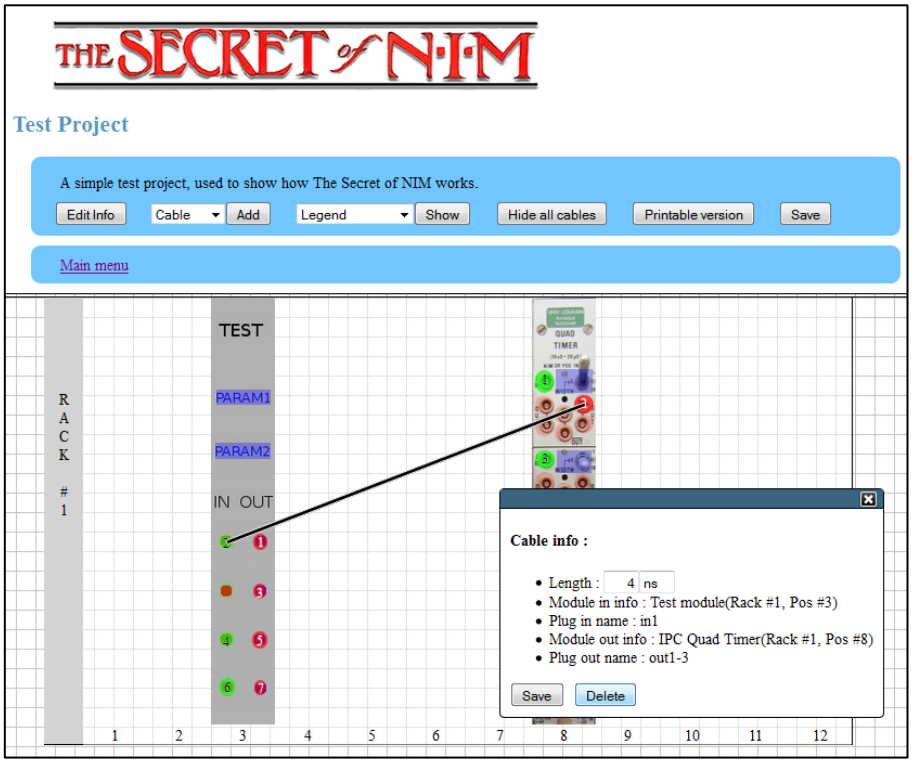


6.14 Delete a wire

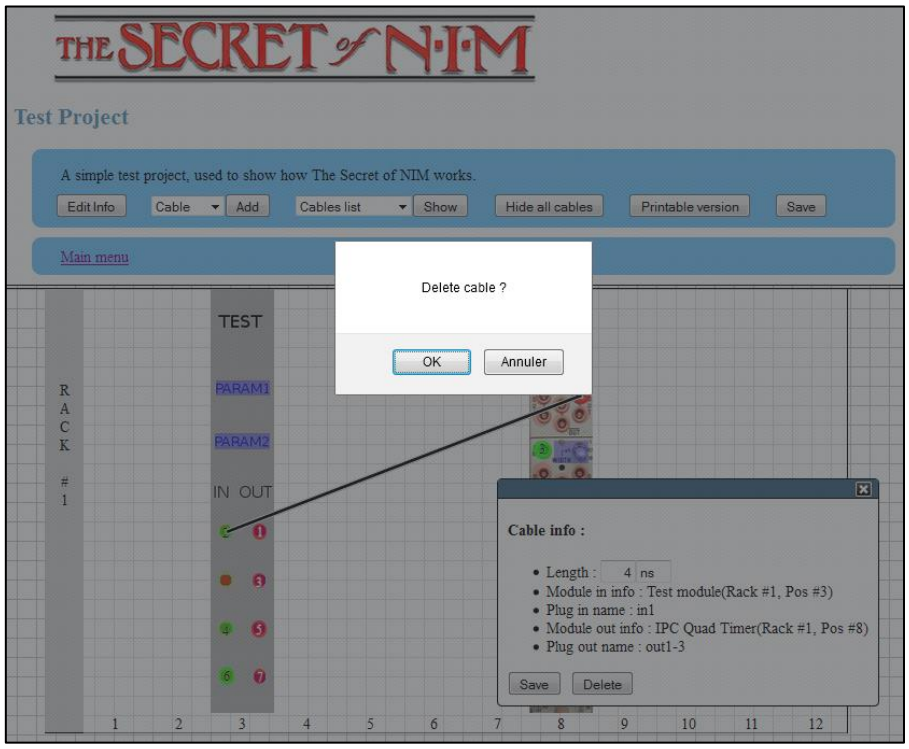
If you want to delete a wire, there are two methods: clicking on one of the plug of the wire or using the “Cable list” dialog box.

6.14.1 First method: Select only one wire

When you click on a plug of a wire, a dialog box appears. Simply click on the “Delete” button.



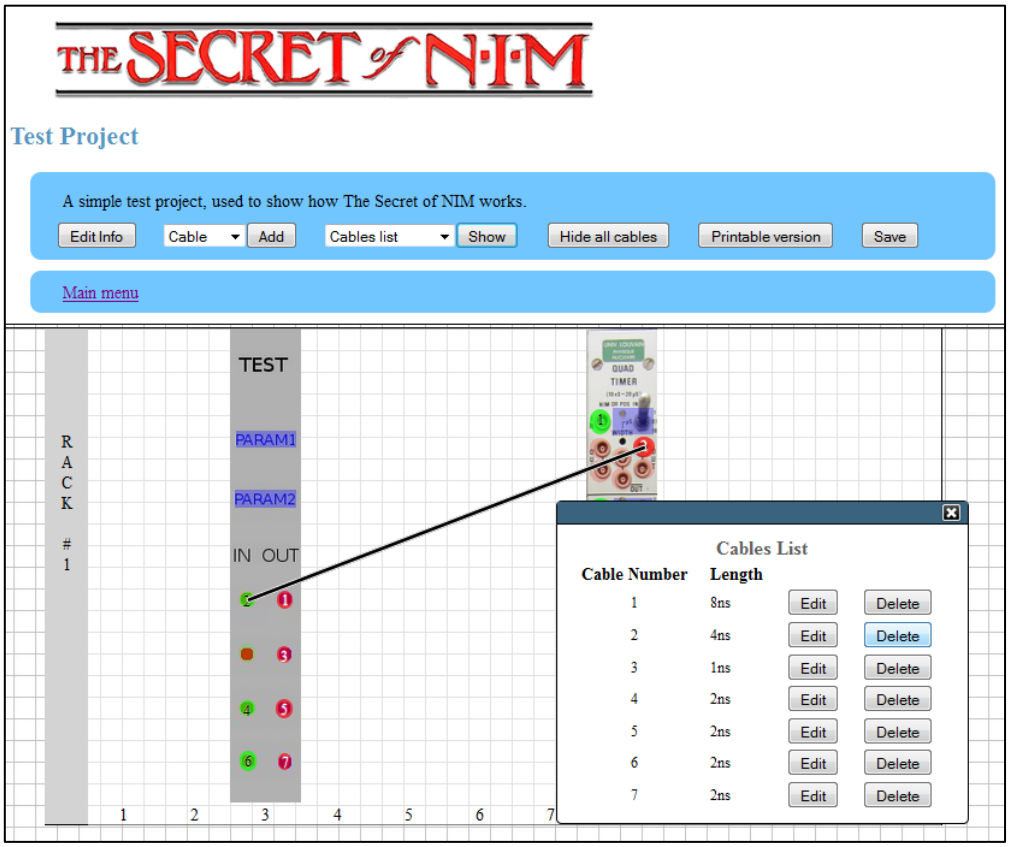
Then confirm.



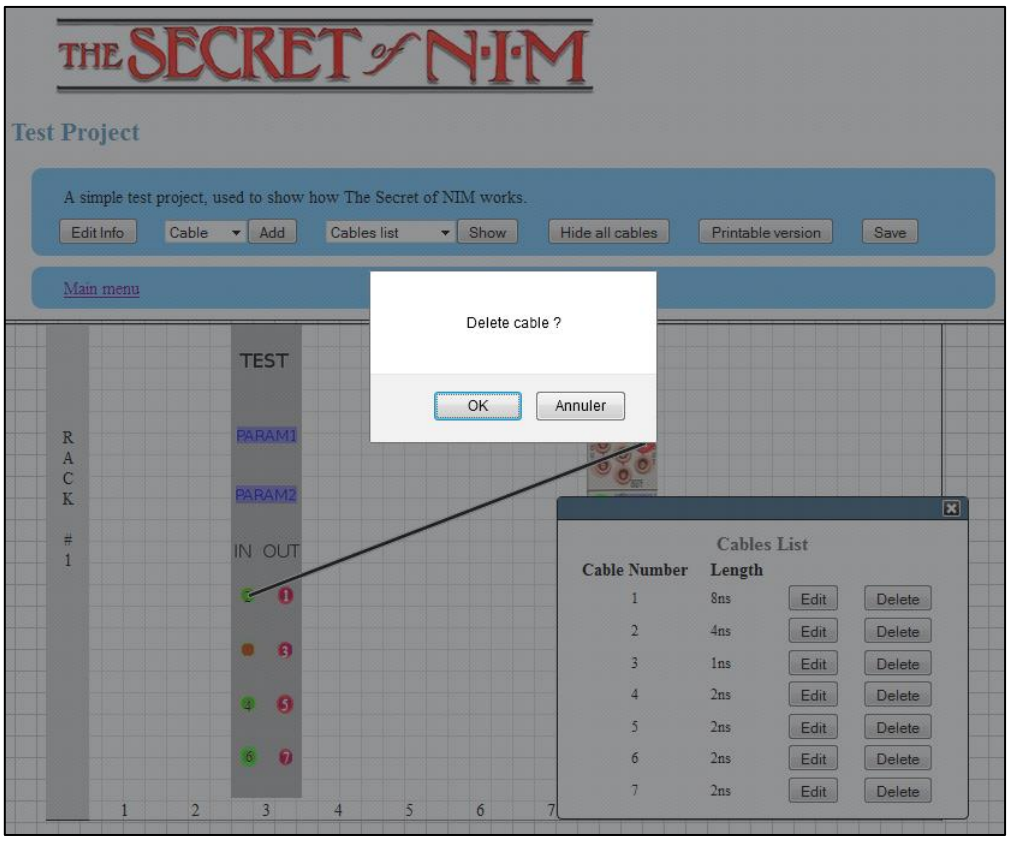
The wire is now deleted.

6.14.2 Second method: Using the cables list

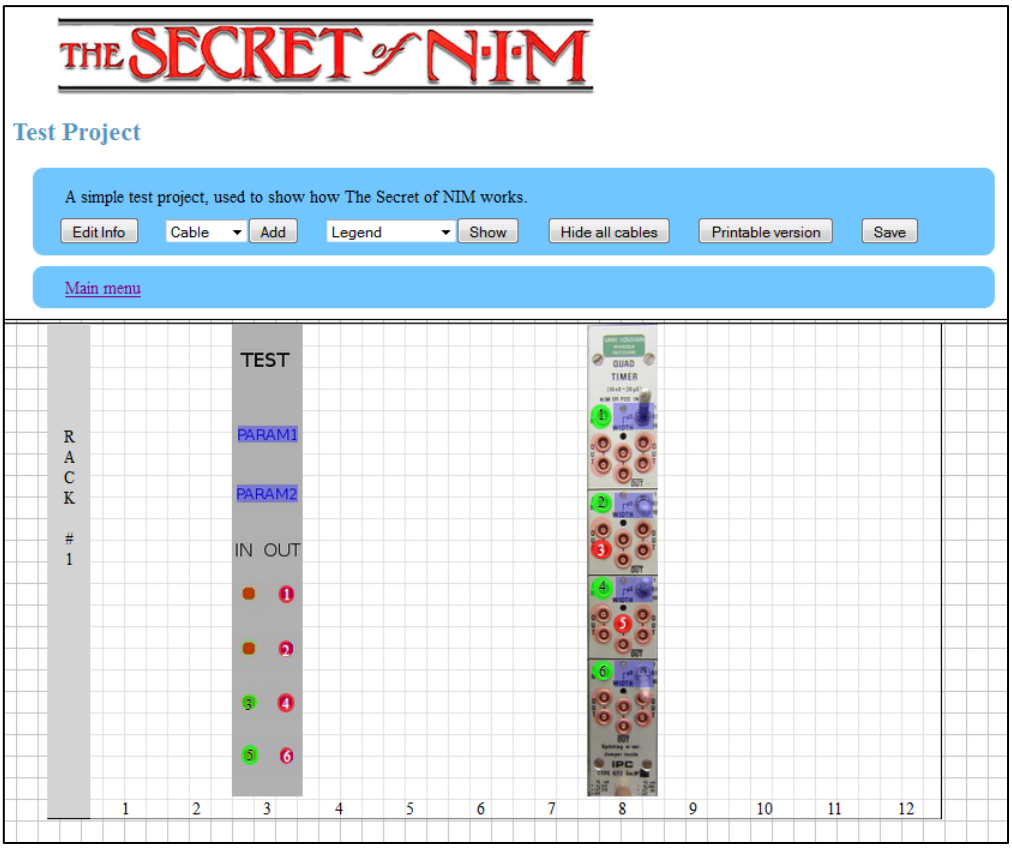
When you open the “Cable list” dialog box, you delete a wire when you click on the “Delete” button associated to that wire.



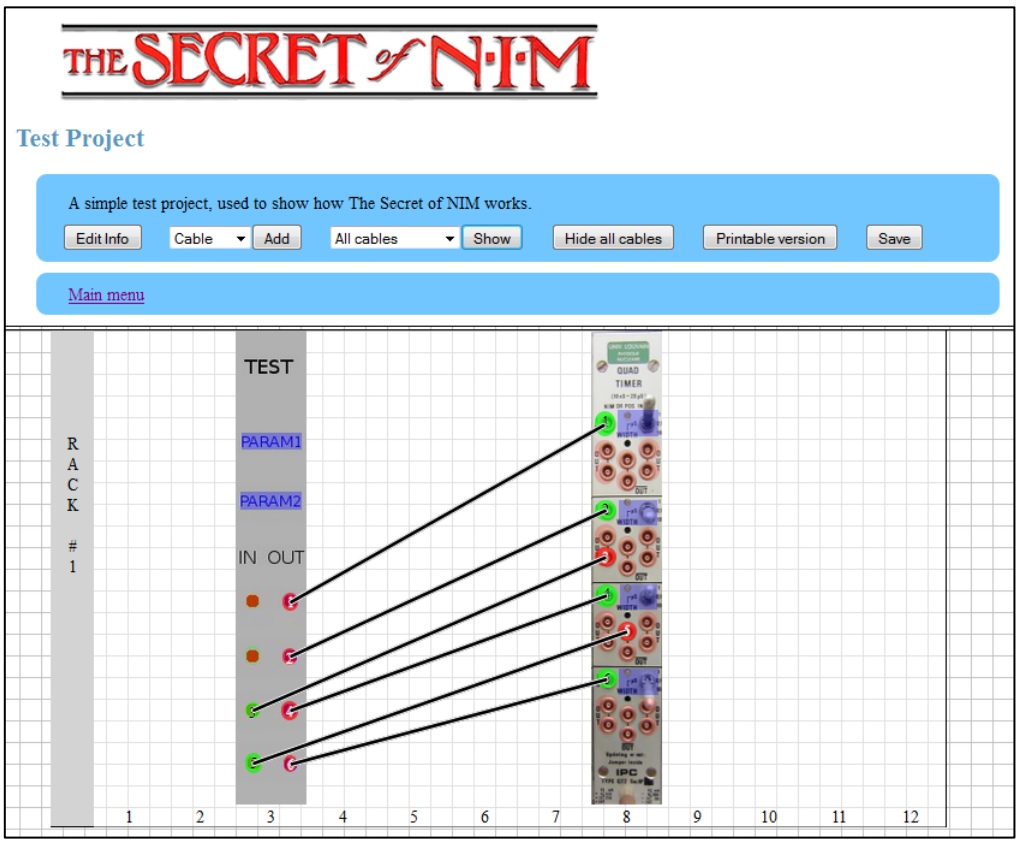
And then confirm your choice.



The wire is now deleted: Both input and output of the wire are now inactive (with no number on it). Note that the numbers of the wires are reorganized, another wire has taken the number “2” of the deleted wire.



You can also show all the wires. Then you see that the wire has well been deleted.



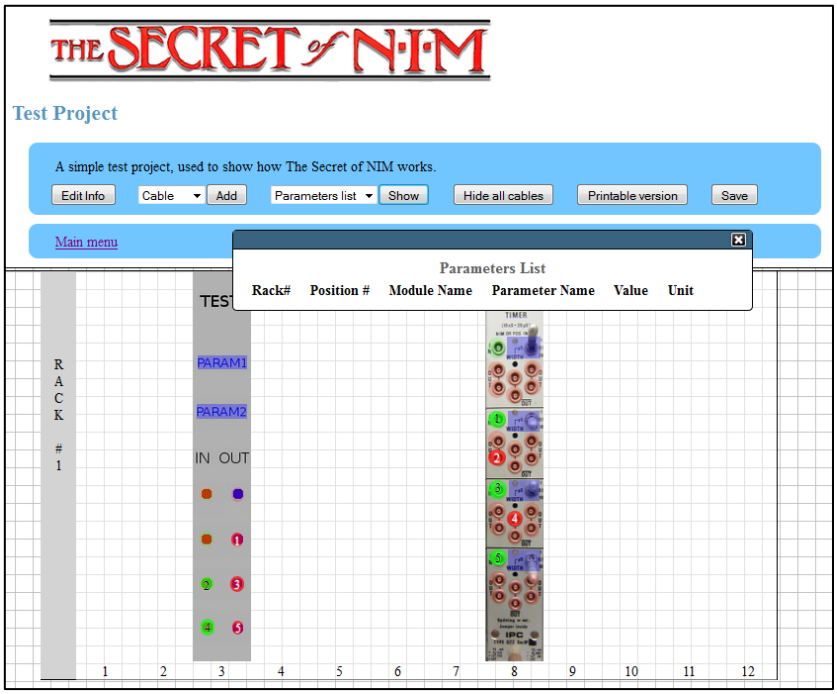
6.15 Set and Edit parameters

If you want to set a module parameter, there is a simple way which is explained here. One method for editing a parameter that is already set is the same, the other method follows the same steps, except that you can have access to the “Edit parameter” dialog box using the “Parameters list” dialog box (click on the “Edit” button associated the parameter you want to edit).

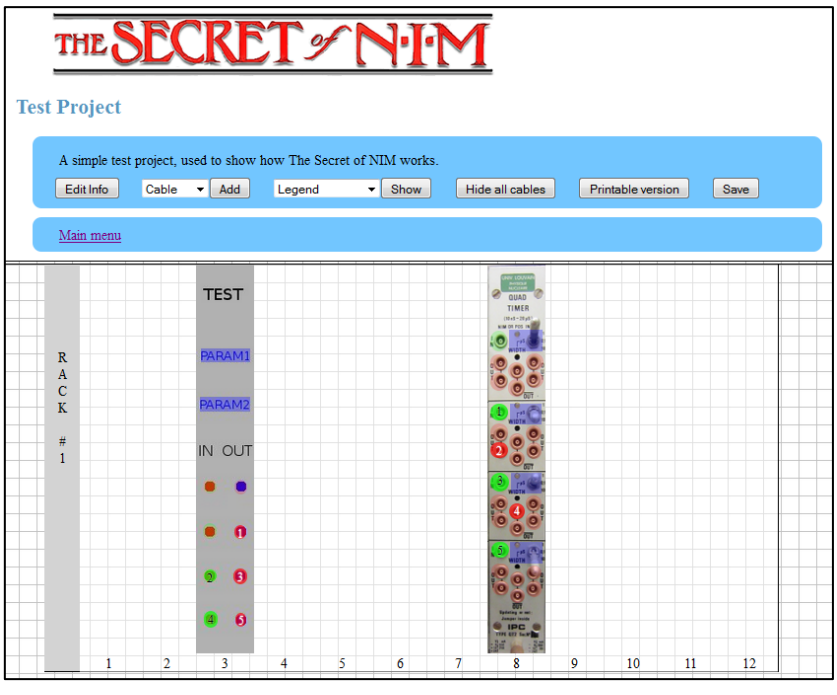
Note that an unset parameter is just a parameter with a value of “0” and “ns” for the unit.

6.15.1 First step: Add and edit a parameter by clicking on it

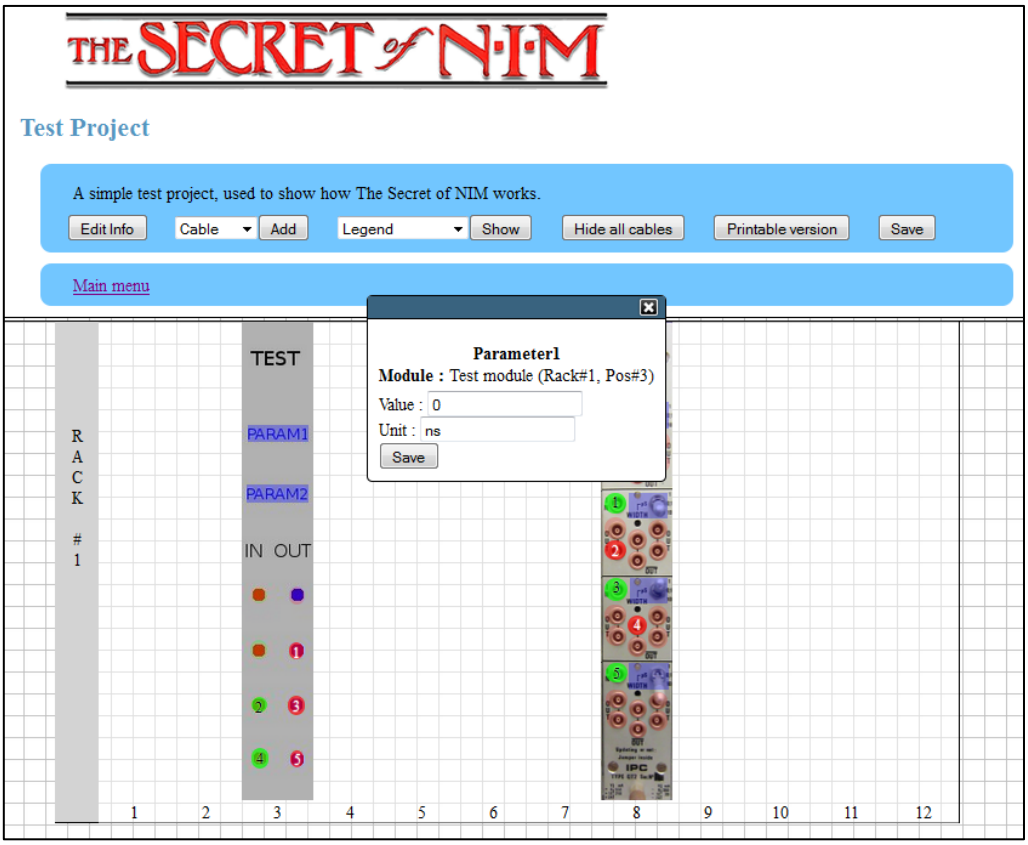
The following steps show how to set a parameter. It starts with a project with no parameters, and adds a first one. First, you see that there are no parameters on the project (show the “Parameters list” as show previously).



If you want to edit one, you have to click on a blue rectangle around the place where the parameter is on the module. Here the blue rectangle where “PARAM1” is noted.

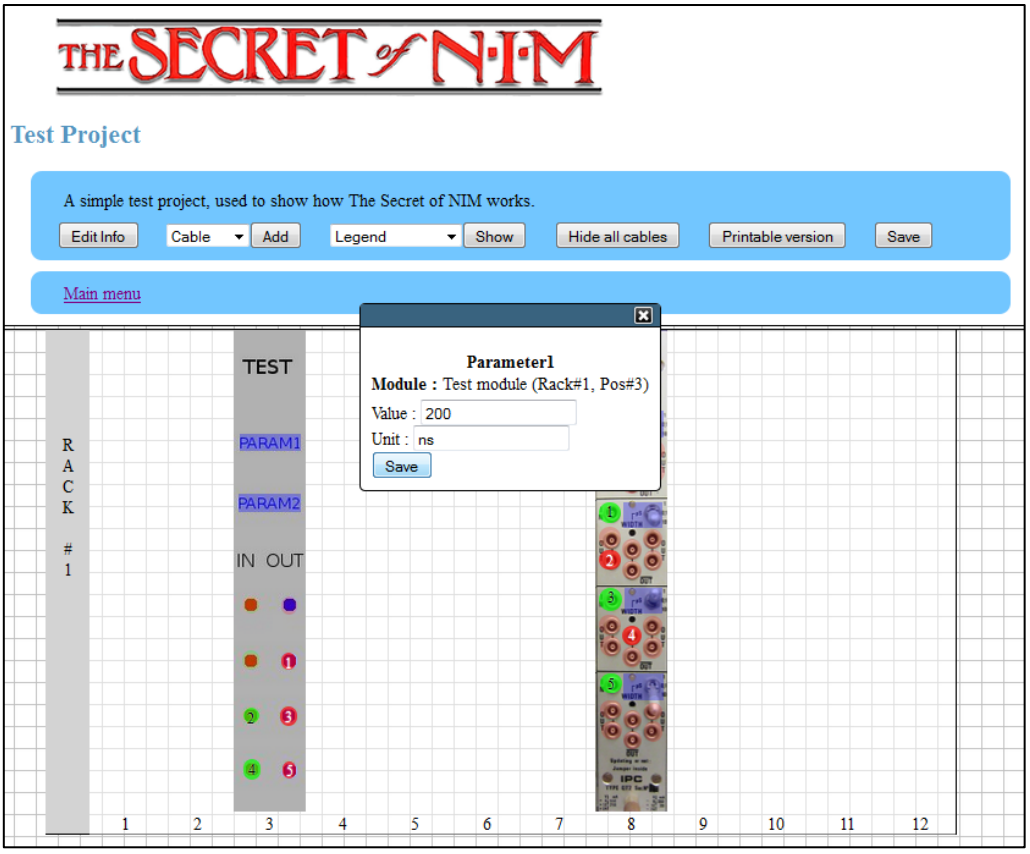


A dialog box appears (the “Edit parameter” dialog box”), set the value and the unit you want for the parameter.

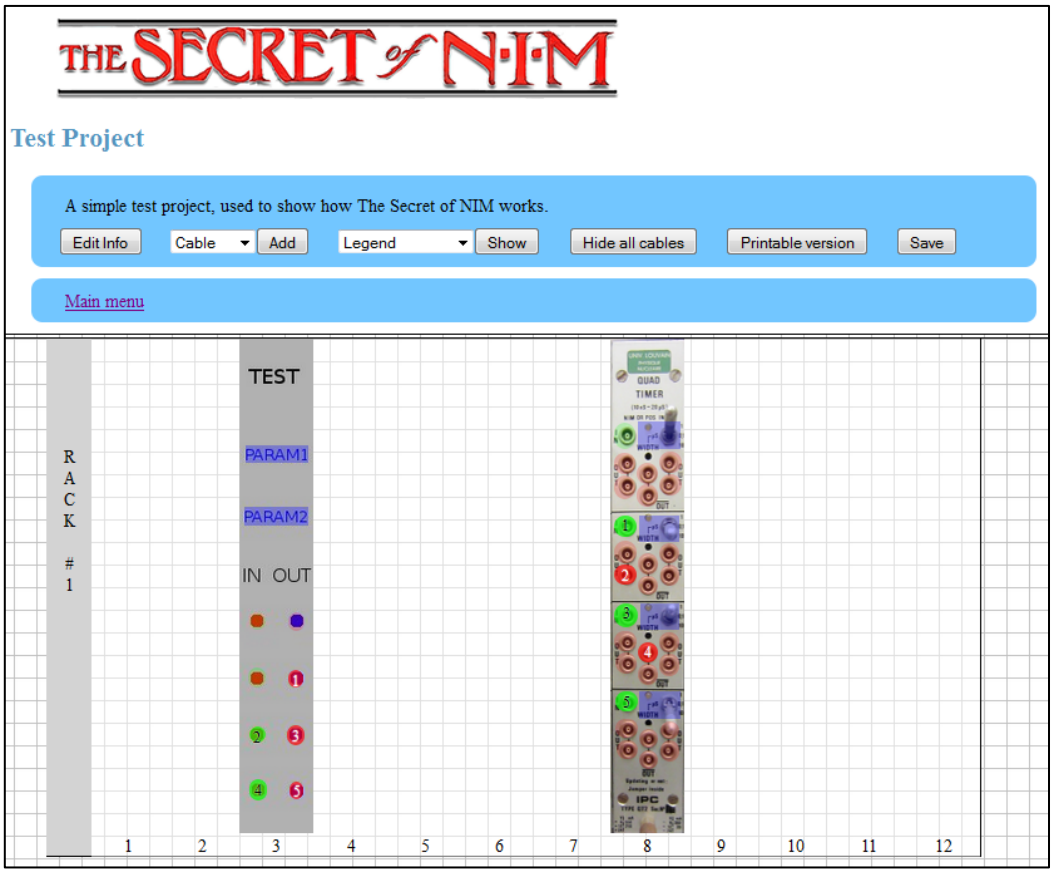


Both unit and value can be text or numbers. Then click the “Save” button.

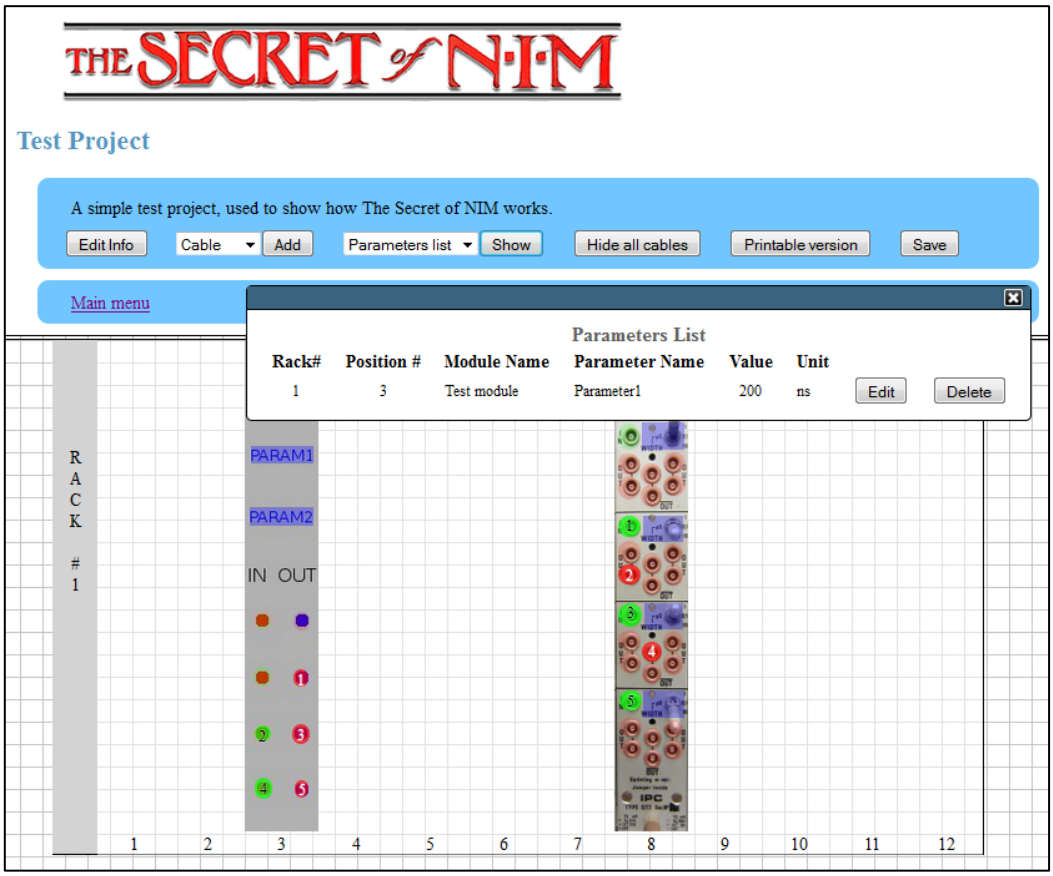
Note that if you use “text” for the unit, the value field will be wider.



The parameter is now set.

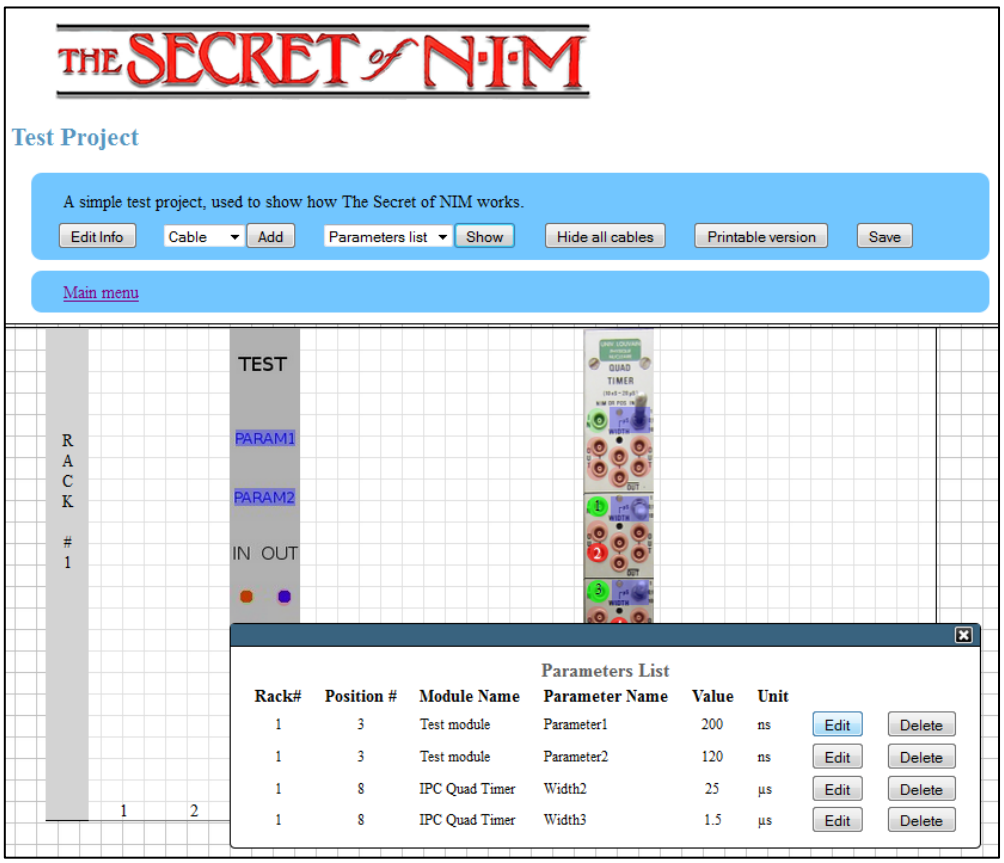


If you show the parameters list, you will see the new one.

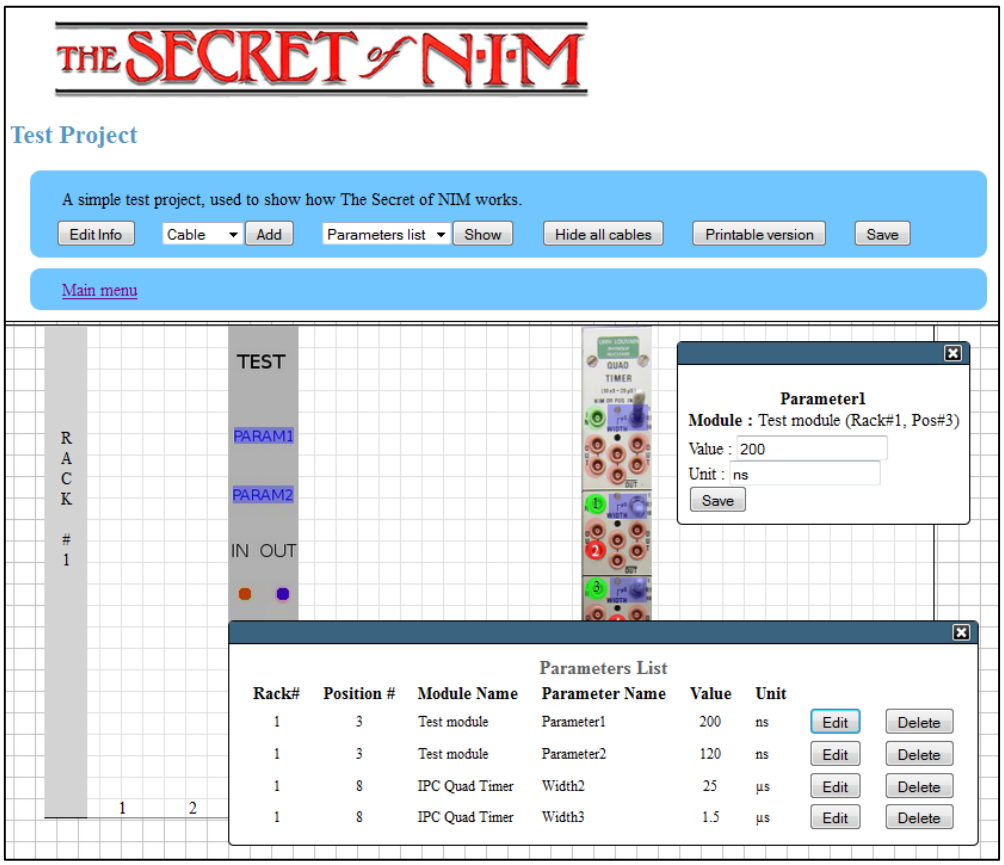


6.15.2 Second method: Edit from the parameters list

First, show the parameters list, and click on the “Edit” button associated to the parameter you want to edit.

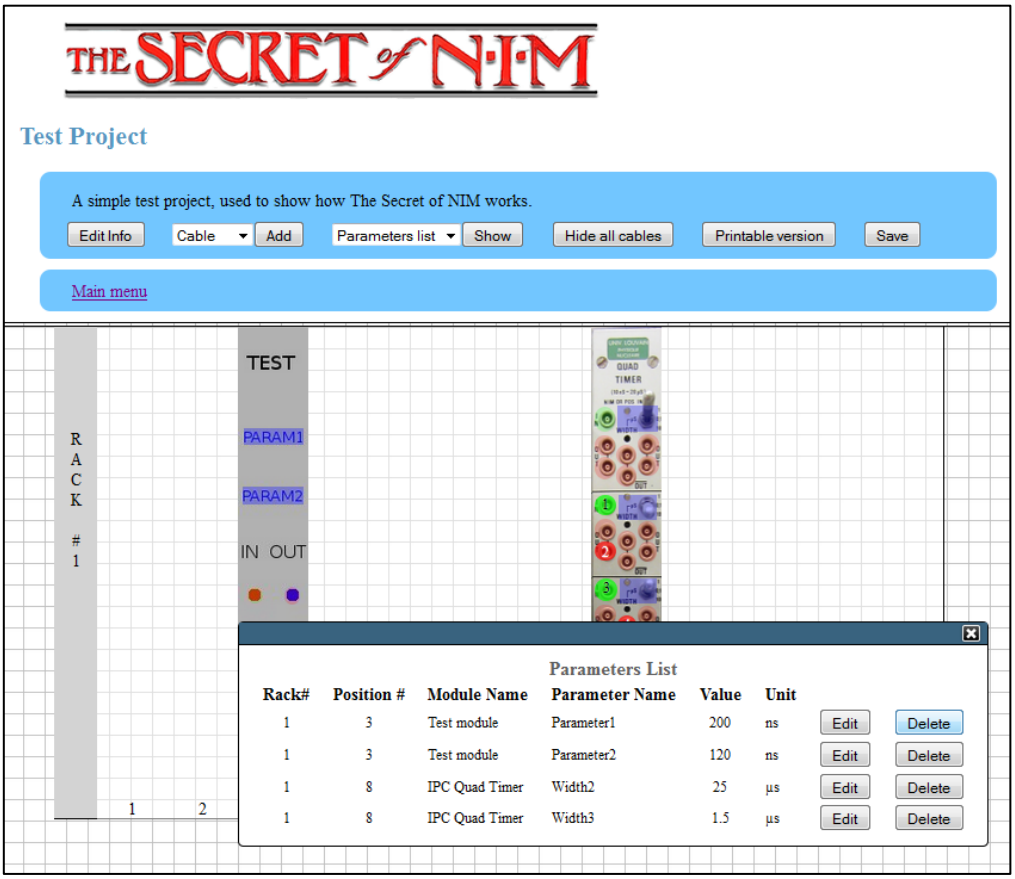


You can see now the same “Edit parameter” dialog box. Follow now the same steps as the previous section.

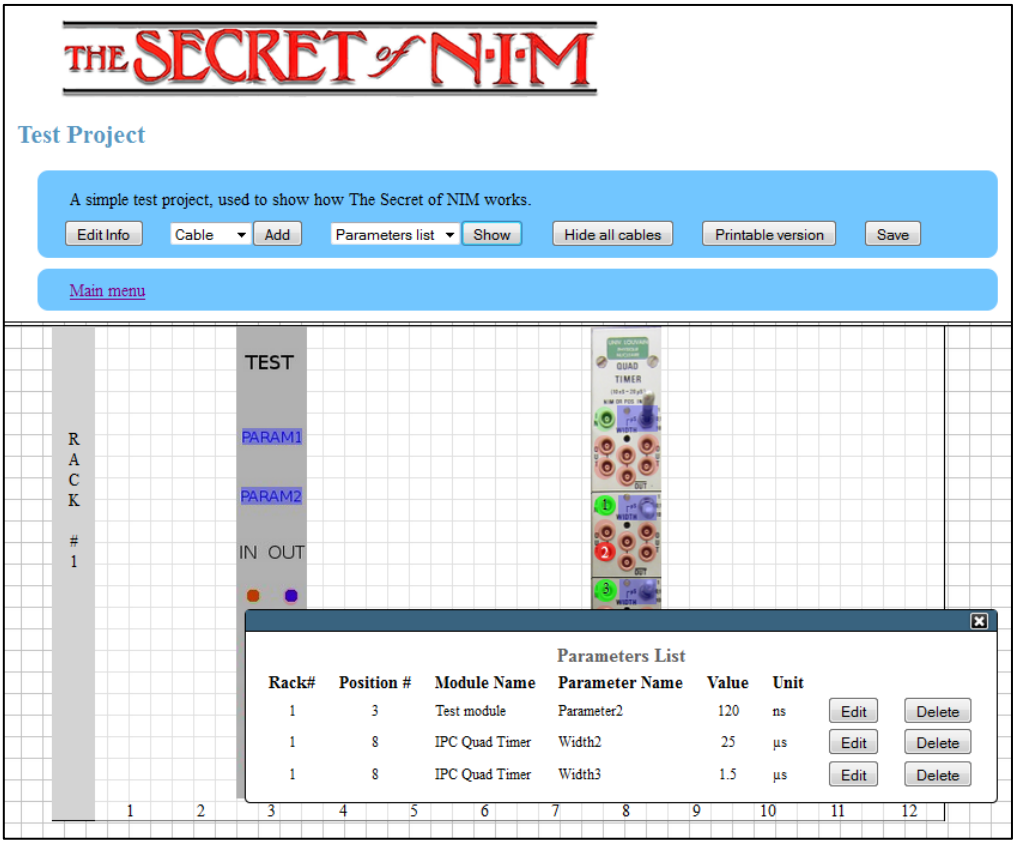


6.16 Delete Parameter

There is another way that allows to unset a parameter. Simply go to the “Parameters list” dialog box.


THE SECRET of N·I·M
Test Project
A simple test project, used to show how The Secret of NIM works.
Edit Info
Cable
Add
Parameters list
Show
Hide all cables
Printable version
Save
Main menu
RACK # 1
TEST
PARAM1
PARAM2
IN OUT
Parameters List
Rack# Position # Module Name Parameter Name Value Unit
1 3 Test module Parameter1 200 ns Edit Delete
1 3 Test module Parameter2 120 ns Edit Delete
1 8 IPC Quad Timer Width2 25 µs Edit Delete
1 8 IPC Quad Timer Width3 1.5 µs Edit Delete

An the click on the “Delete” button associated to the parameter you want to unset.



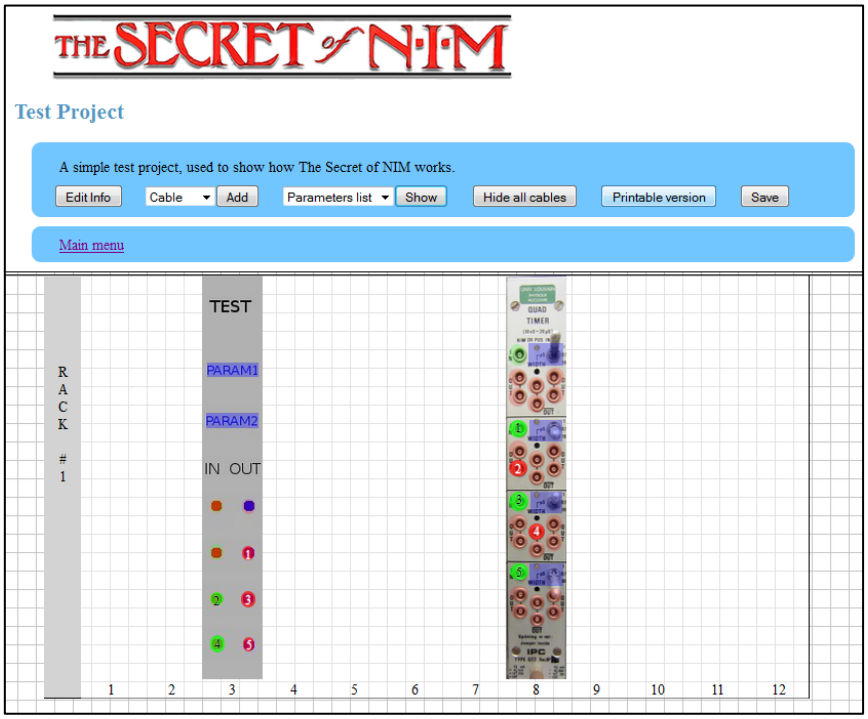
6.17 Print the project

The “Project” page of The Secret of NIM is a very powerful utility for seeing the wiring of a project on a computer, but not very useful when printed. A useful functionality of the program is the “Printable version” page. This page show all the modules of the project, the “Cables list” dialog box and the “Parameters list” dialog box in a black and white presentation. Yon can then use the “Print” utility of your web browser to save the page in a pdf version.

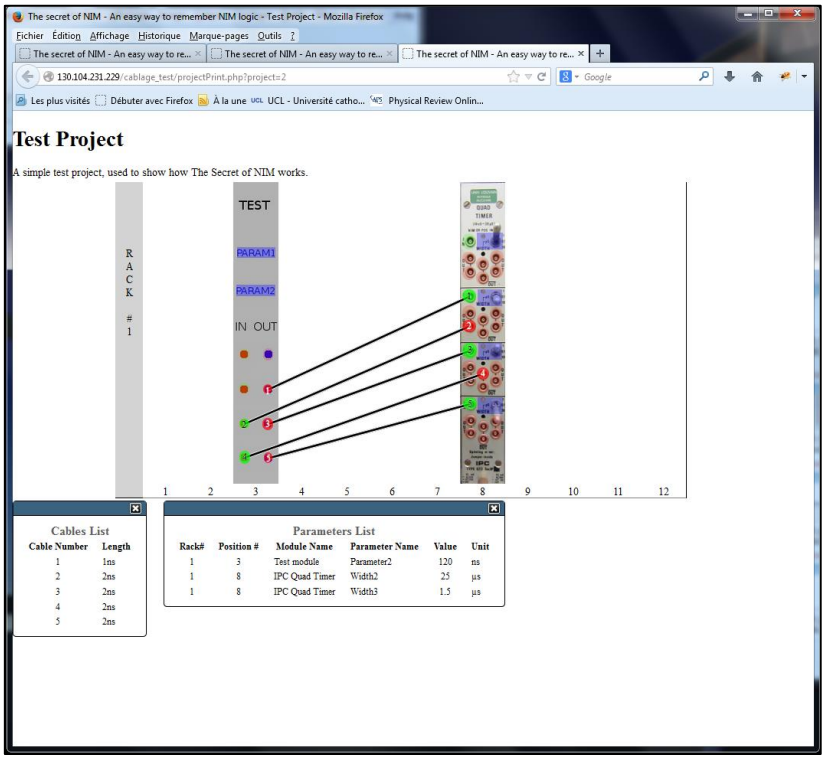
The method shown here use Firefox, but similar methods may apply for other browser.

6.17.1 First method: Using the “Project” page

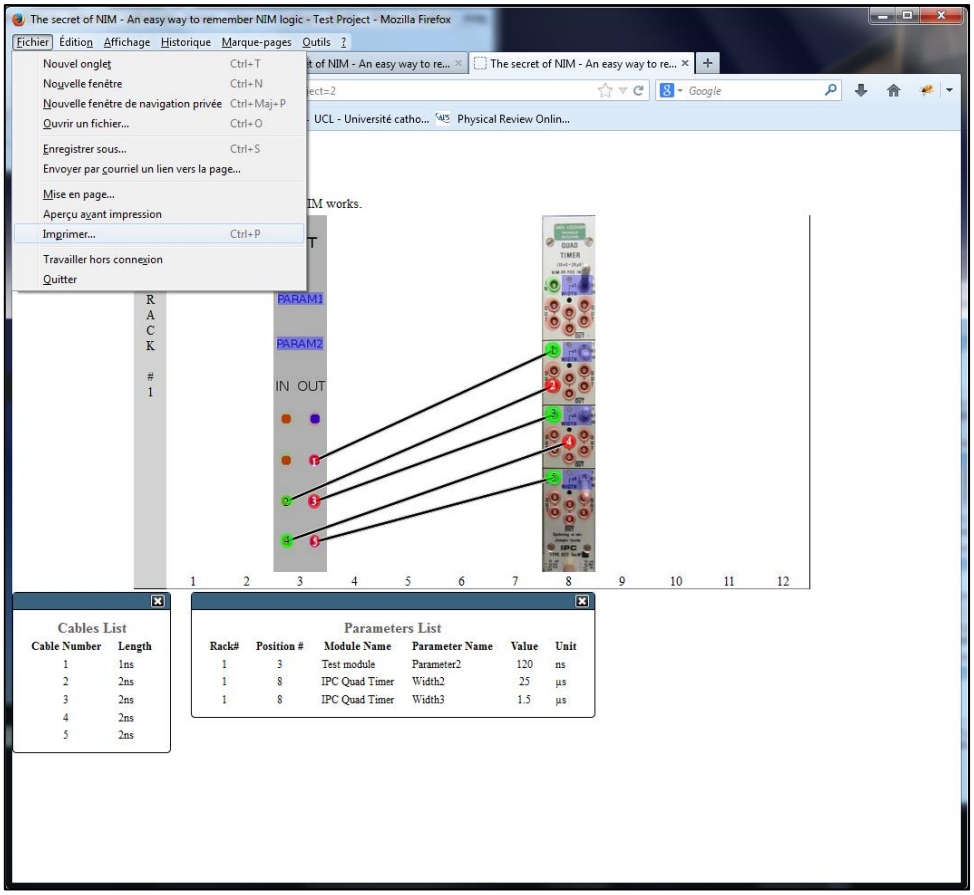
Simply click on the “Printable version” button.



A new page appears. Move the dialog boxes wherever you want to increase the visibility of the project.

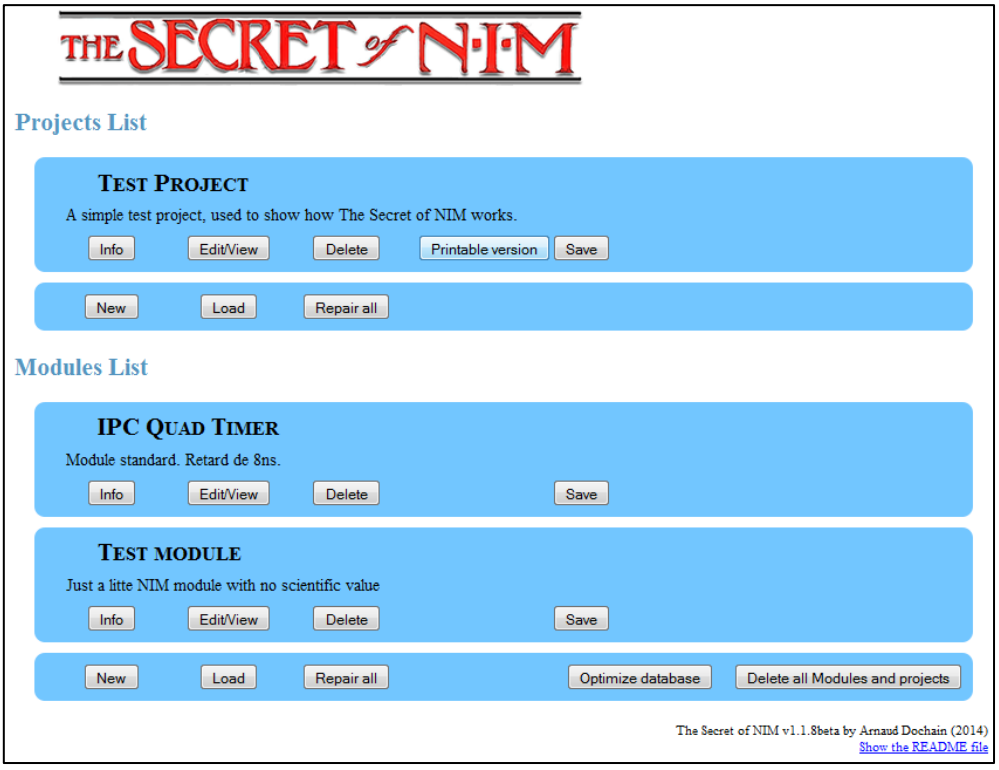

Test Project
A simple test project, used to show how The Secret of NIM works.
Cables List
Cable Number Length
1 1ns
2 2ns
3 2ns
4 2ns
5 2ns
Parameters List
Rack# Position # Module Name Parameter Name Value Unit
1 3 Test module Parameter2 120 ns
1 8 IPC Quad Timer Width2 25 µs
1 8 IPC Quad Timer Width3 1.5 µs

Then simply go to the “Print” option of your browser (usually in the “Files” menu). Then select “Print in a file” to save your project in a PDF version.


The secret of NIM - An easy way to remember NIM logic - Test Project - Mozilla Firefox
Fichier Édition Affichage Historique Marque-pages Outils ?
Nouvel onglet Ctrl+T
Nouvelle fenêtre Ctrl+N
Nouvelle fenêtre de navigation privée Ctrl+Maj+P
Ouvrir un fichier... Ctrl+O
Enregistrer sous... Ctrl+S
Envoyer par courriel un lien vers la page...
Mise en page...
Aperçu avant impression
Imprimer... Ctrl+P
Travailler hors connexion
Quitter
Cables List
Cable Number Length
1 1ns
2 2ns
3 2ns
4 2ns
5 2ns
Parameters List
Rack# Position # Module Name Parameter Name Value Unit
1 3 Test module Parameter2 120 ns
1 8 IPC Quad Timer Width2 25 µs
1 8 IPC Quad Timer Width3 1.5 µs

6.17.2 Second method: Using the Main Menu

The method is the same, except that you have to use the “Printable version” button associated to the project you want to print.

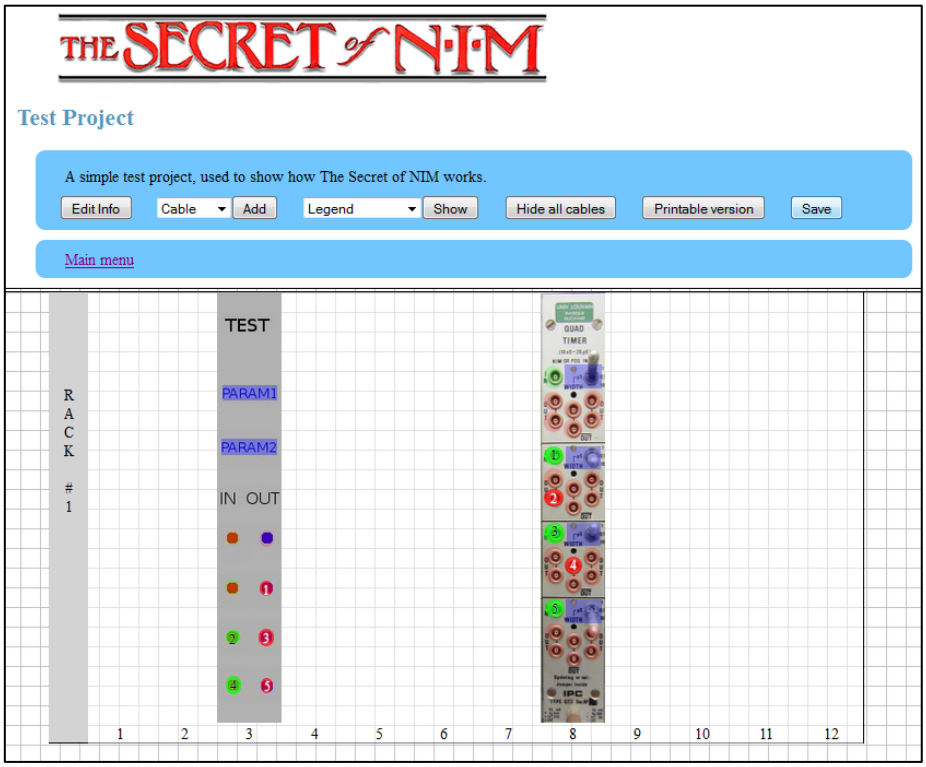

THE SECRET of N·I·M
Projects List
TEST PROJECT
A simple test project, used to show how The Secret of NIM works.
Info EditView Delete Printable version Save
New Load Repair all
Modules List
IPC QUAD TIMER
Module standard. Retard de 8ns.
Info EditView Delete Save
TEST MODULE
Just a litte NIM module with no scientific value
Info EditView Delete Save
New Load Repair all Optimize database Delete all Modules and projects
The Secret of NIM v1.1.8beta by Arnaud Dochain (2014)
Show the README file

6.18 Save project on disc

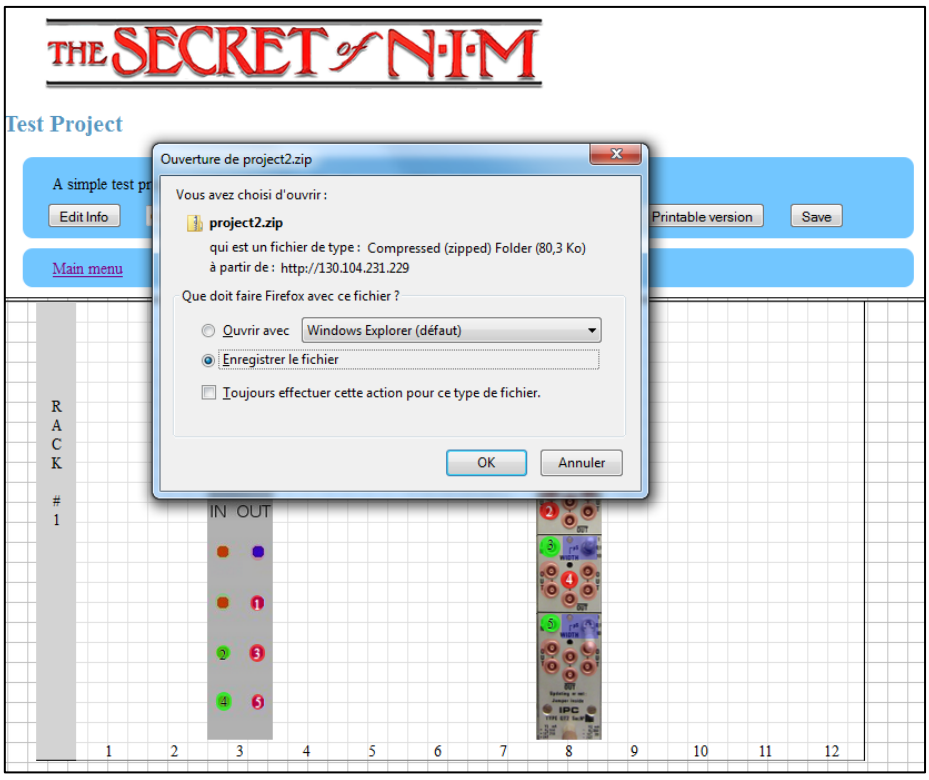
If your project is finish, all the cables are plugs all the modules are set… You might save it somewhere on your computer. The method is very simple: Click on the “Save” button. The Secret of NIM will create a “ZIP” file with all the wires, the cables, the modules and all the parameters. Then it allows you to save this file on your computer. And you will be allowed to save it later.

6.18.1 First method: Using the “Project” window

In practice, when you are on the “Project” window, click on the “Save button”.

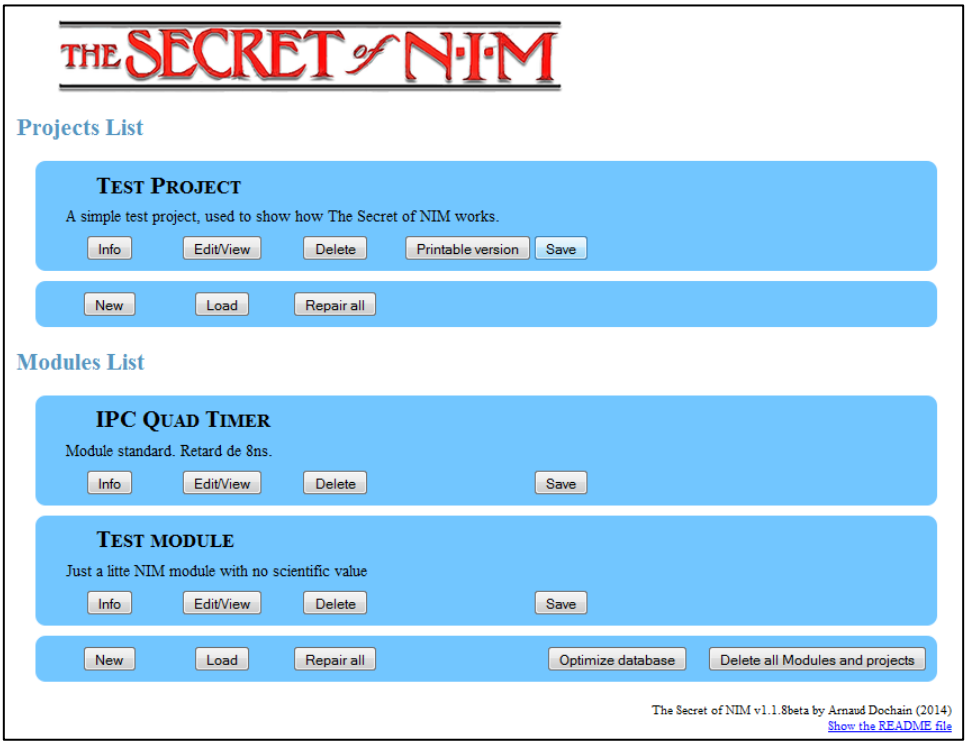


Then choose where you want the “ZIP” file to be saved.

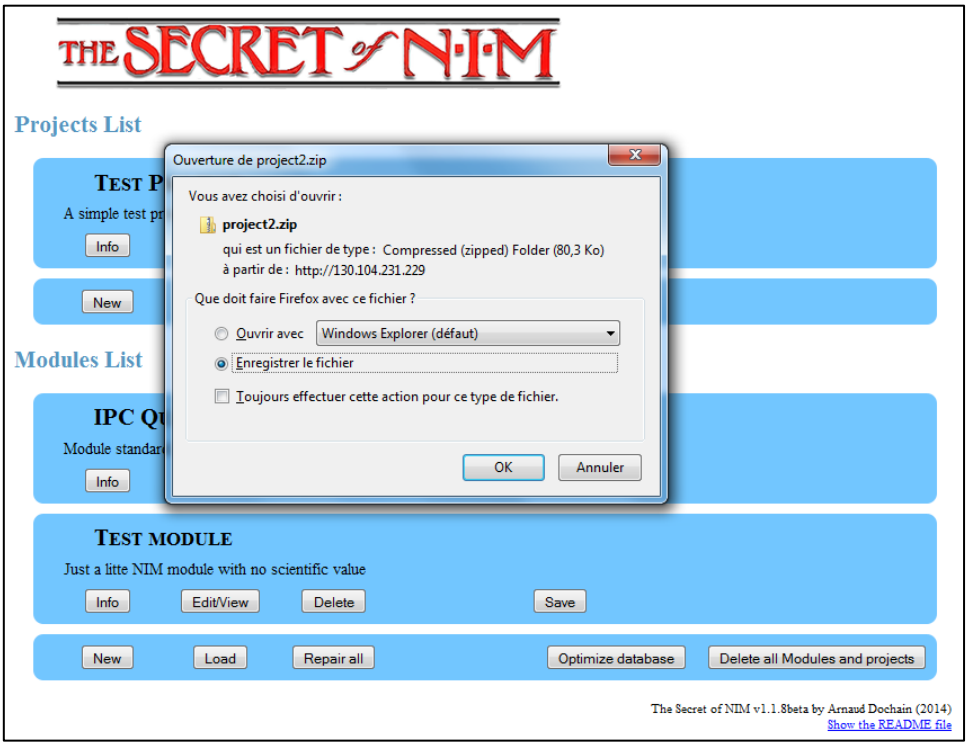


6.18.2 Second method: Using the "Main Menu"

When you are on the "Main menu" click on the "Save" button associated to the project you want to save.

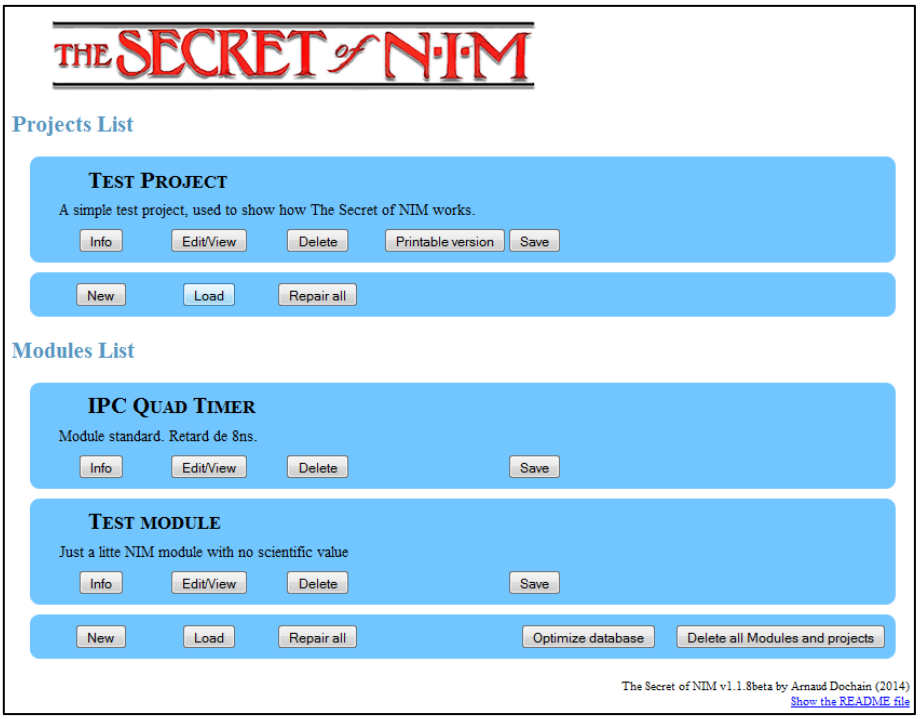


Then select where you want the "ZIP" file to be saved on your computer.

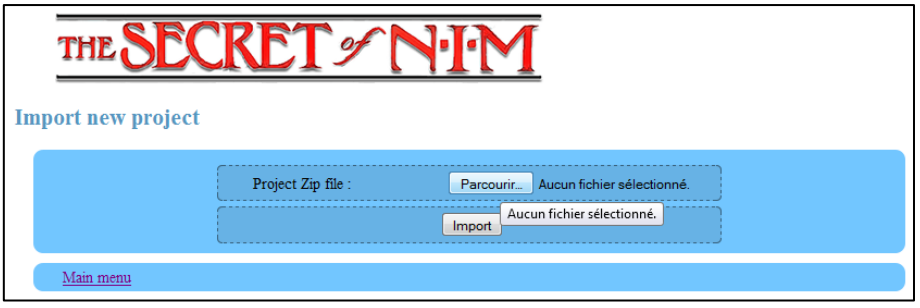


6.19 Load a project from the disc

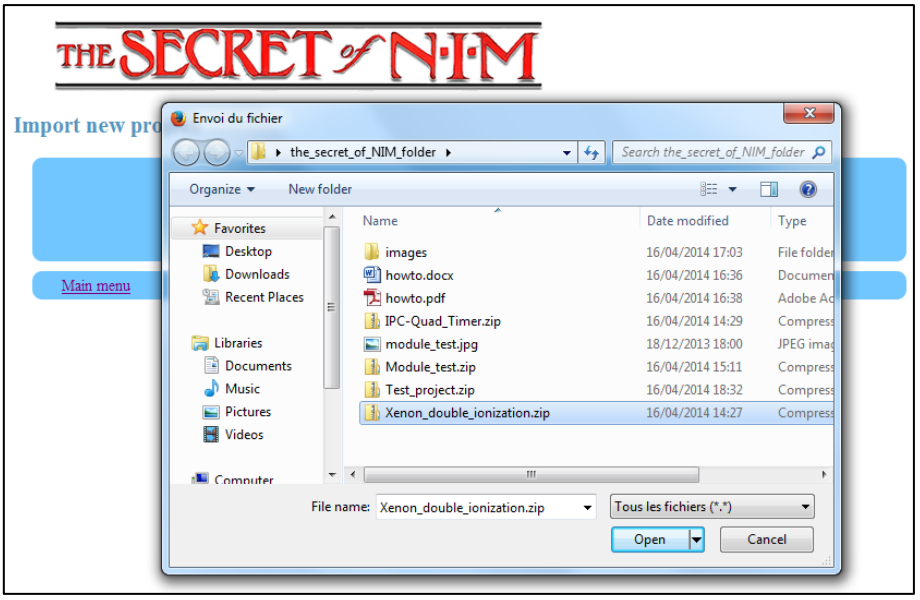
Once you have saved you project, you can also load it. It is really easy. First click on the “Load” button on the “Main Menu” page at the bottom of the “Project list” section.



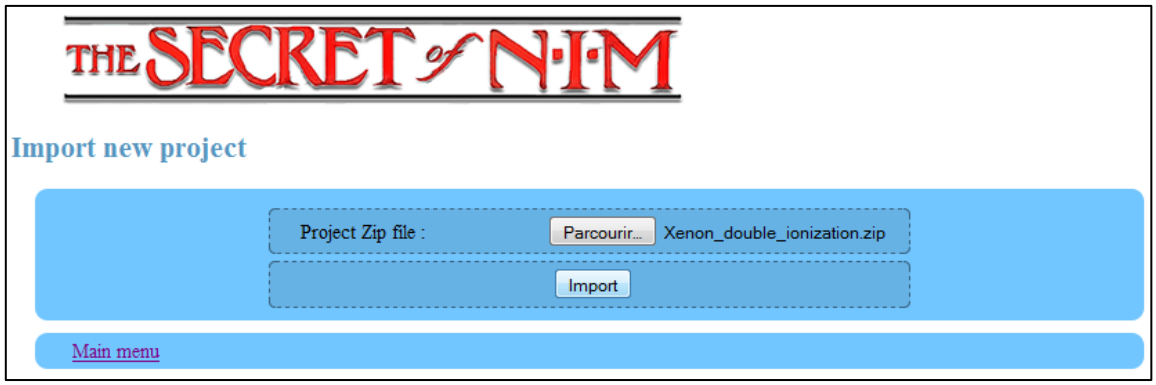
You get a new page, click on the “Select file” button.



Then choose your ZIP project file.



When you have selected it, simply click on the “Import button”.

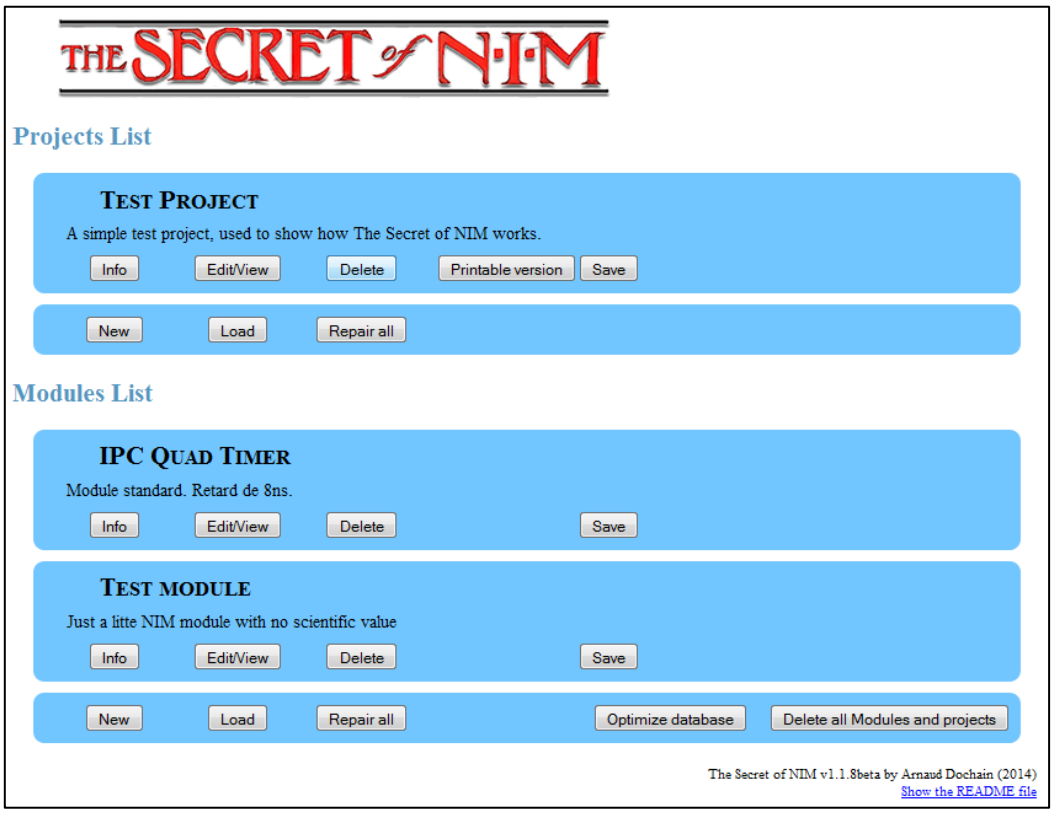


Your project is now loaded.

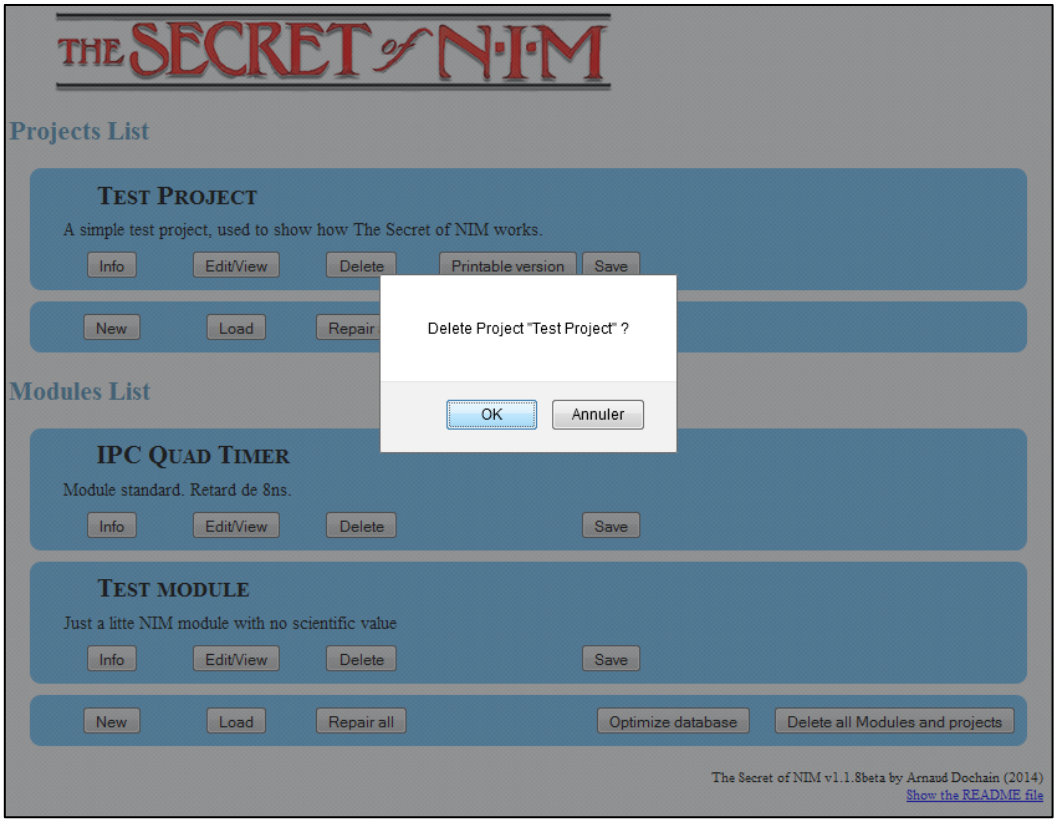
6.20 Delete a project

The last basic thing you can do with a project is deleting it. If you have finished and saved your work, it might be pleasant to delete it.

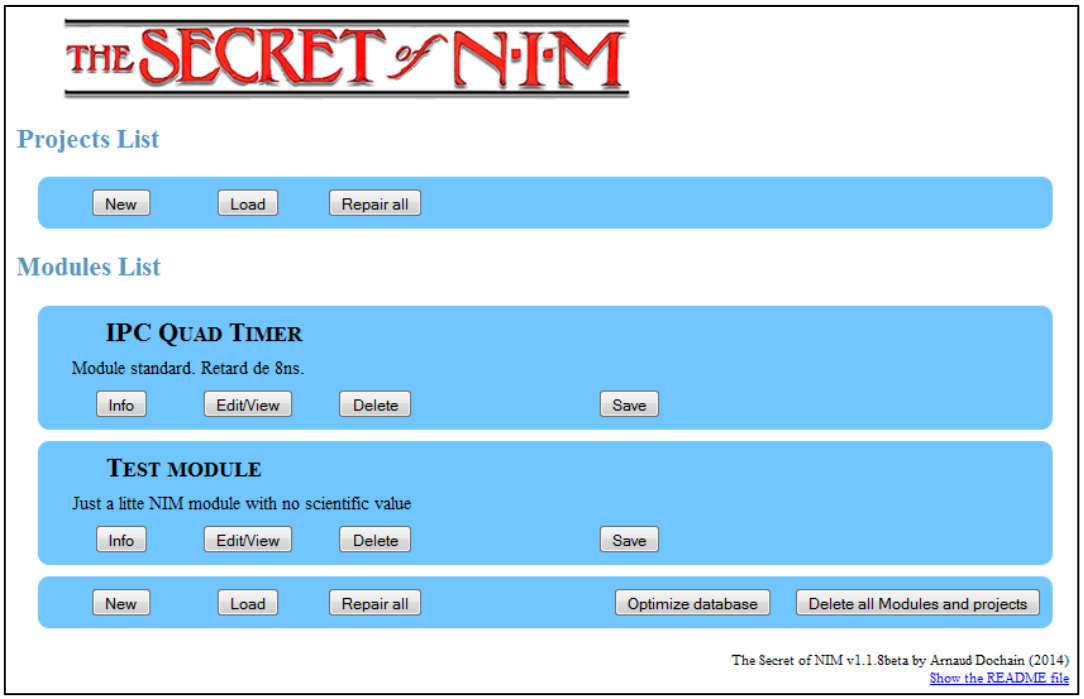
The method is very simple. First click on the “Delete” button associated to the project you want to delete.



Then confirm.



It’s done! You have now deleted your project!



Note that the modules associated to the project have not been deleted.

7 Advanced functionalities

7.1 Repair all project

Sometime when you modify some module used in a project, the project won't open. This is caused by a change of the index of some entries of the database. If that kind of problem happens, click on the "Repair all" button in the "Project list" section of the "Main Menu". It will delete all the elements of the database that is not linked (or with a bad link): modules, cables, parameters and racks.

This option may cause loss of data.

7.2 Repair all modules

Same as "Repair all projects"

7.3 Optimize database

While you create, load and delete some project, the index in the database start to increase. This increasing of the index can slow The Secret of NIM. The "Optimize database" button will reduced as much as it can the indexes of the database.

It can accelerate the software.

Warning: This functionality has not been tested as much as all the other ones, so it may lead to a loss of data. Make sure that you have saved all your data before using it.

7.4 Delete all projects and modules

As it says, it deletes all the modules and the project. It's faster than deleting them one by one. Simply click on the "Delete all Modules and projects" button at the bottom of the page.

Thanks for reading…